COUNTY HEALTH STATUS PROFILES 2000

**Department of
Health Services and
California
Conference of Local
Health Officers**

Public Health Week: April 3-9, 2000

COUNTY HEALTH STATUS

PROFILES
2000

Distributed by
California Department of Health Services
Diana M. Bontá, R.N., Dr. P.H.
Director

Health Information and Strategic Planning
George B. (Peter) Abbott, M.D., M.P.H.
Acting Deputy Director

Center for Health Statistics
Michael L. Rodrian, Chief

Office of Health Information and Research
Anthony Oreglia, Chief

Planning and Data Analysis Section
Michael Quinn, Chief

In collaboration with
California Conference of Local Health Officers
Gary Feldman, M.D.
President

ACKNOWLEDGMENTS

DEPARTMENT OF HEALTH SERVICES
714/744 P STREET
P. O. BOX 942732
SACRAMENTO, CA 94234-7320
(916) 657-1425

Dear Colleague:

We are pleased to present the eighth edition of *County Health Status Profiles* for Public Health Week, April 3-9, 2000. This report contains selected health status indicators recommended by the U.S. Public Health Service for monitoring state and local progress toward achieving some of the goals set forth in *Healthy People 2000*. The Year 2000 National Health Objectives challenge public health professionals to increase the span of healthy life, reduce health disparities, and ensure access to preventive services for all Americans.

The set of health indicators from year to year remains relatively unchanged. The *Profiles* report is evaluated with each annual edition and amended according to priorities developed by the Department of Health Services and the California Conference of Local Health Officers. Critiques on style and technical presentation of last year's report have been incorporated wherever possible.

We believe this report represents an important means to assess public health in California. The health status indicators are based on data that are readily available for providing information to guide the future course of health promotion and preventive services.

Diana M. Bontá, R.N., Dr. P.H.   Gary Feldman, M.D.
Director   President
California Department of Health Services   California Conference of Local Health Officers

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INTRODUCTION

The collection, analysis, and use of public health data are essential components of a fully functioning public health program at the national, state, and local levels. Assessment of public health is enhanced when data collected at the state and local levels can be directly compared with clearly established benchmarks, such as national standards, and populations of similar composition, according to the Institute of Medicine's 1988 report entitled, ***The Future of Public Health.***

Recognition of the importance of well-defined goals and objectives for improving the health of the nation by the United States Public Health Services (USPHS), resulted in the publication of ***Healthy People 2000: National Health Promotion and Disease Prevention Objectives for the Nation***. Priority Area 22 in this report was established to develop and improve a statistical infrastructure that would allow all levels of government to monitor progress and to evaluate health status changes toward meeting the Year 2000 objectives. In response to the specifications of Objective 22.1, the Centers for Disease Control and Prevention (CDC) convened a committee to identify health status indicators. The committee members agreed that the indicators must have the following characteristics:

- Be few in number (10-20).

- Be comprehensive.

- Include global measures to assess morbidity, mortality, and quality of life.

- Include specific measures of community health.

- Contain a subset that is consistent at the federal, state, and local level.

- Be readily and uniformly understandable, and acceptable.

- Be measurable using available data.

- Imply specific interventions compelling action.

- Be outcome oriented.

For ***County Health Status Profiles***, some modifications have been made to the list of 18 indicators chosen by the committee. Principally, health indicators for Air Quality and for Work Related Deaths were omitted from the report, but indicators for adequacy of prenatal care (Adequacy of Prenatal Care Utilization Index) and breastfeeding initiation during early postpartum were added. Other health indicators, which have no established Year 2000 National Objective, but were included in this report are: deaths due to all causes; infant mortality tables among Asian/Other, Hispanic and White; and birth rates among adolescent mothers aged 15-19.

This edition of the *Profiles* for 2000 utilizes essentially the same health indicators and report format as last year. However, in response to an initiative proposed by the Department of Health Services Breastfeeding Promotion Committee, a new table (Table 21) presenting breastfeeding incidence rates among women delivering their newborn in a California hospital was added to *Profiles* this year.

This report presents vital statistics and morbidity tables that show the population, number of events, percentages, crude rates, and age-adjusted death rates by county. Also shown on these tables are the upper and lower 95% confidence limits, which provide a means for assessing the degree of stability of the estimated rates and percentages. Vital statistics rates and percentages are also subject to random variation, which is inversely related to the number of events (e.g. deaths) used to calculate the rates and percentages. Therefore, standard errors and relative standard errors (coefficients of variation) are calculated to measure the reliability of the rates and percentages. Estimated rates and percentages which are categorized as unreliable (relative standard error $\geq$ 23%) are marked on these tables with an " * " (asterisk). The counties on these tables are ranked by the rates or percentages, regardless of their reliability, in ascending order. Those with identical rates or percentages are ranked next by the county's population size in descending order.

The **"Highlights"** and the explanatory **"Notes"** are adjacent to each of the tables. The explanatory **"Notes"** as well as the **"Technical Notes"** are provided to assist the readers with information on data limitations and qualifications for correctly interpreting and comparing these data among the counties. For those who may want to learn more about the problems associated with analysis of vital events involving small numbers, small area analysis, and age-adjusted death rates, references to relevant statistical publications are located in the Bibliography.

Data for this report have been provided by the California Department of Health Services' Center for Health Statistics, Division of Communicable Disease Control, Genetic Disease Branch, and the Office of AIDS. In addition, the Demographic Research Unit and the Census Data Center of the Department of Finance provided the 1990 census data and the 1997 race/ethnic population estimates by county with age and sex detail, June 1999.

If you have questions about this report, or desire additional state or county health status data and statistics (either hard copy reports or electronic media), please write or call:

California Department of Health Services
Center for Health Statistics
304 S Street, Third Floor
P. O. Box 730241
Sacramento, CA 94244-0241
Telephone (916) 445-6355
www.dhs.ca.gov

Should you wish additional copies of *County Health Status Profiles*, instructions for placing your order appear in the back of this report.

TABLE 1: DEATHS DUE TO ALL CAUSES, 1996-1998

California Counties Ranked By Three-Year Average Age-Adjusted Death Rate

The crude death rate from all causes for California was 678.9 per 100,000 population, a risk of dying equivalent to approximately one death for every 147 persons. This rate was based on a three-year average number of deaths of 223,732.0 from 1996 to 1998, and a population of 32,956,695 as of July 1, 1997. Among counties with "reliable" rates, the crude rate ranged from 1,384.9 in Lake County to 414.6 in Mono County, a difference in rates by a factor of 3.3 to 1.

The age-adjusted death rate from all causes for California for the three-year period from 1996 to 1998 was 425.7 per 100,000 population. Reliable age-adjusted death rates ranged from 595.4 in Trinity County to 312.5 in Mono County. The difference between crude and age-adjusted rates shows how the county age composition differs from the 1940 United States population (the "standard population").

A Year 2000 National Objective for deaths due to all causes has not been established.

Notes:

Death rates are per 100,000 population. The crude death rate is the actual risk of dying. The age-adjusted rate is the hypothetical rate that the State/County would have if its population were distributed by age in the same proportions as the 1940 United States population.

*   Death rate unreliable, relative standard error is greater than or equal to 23%.

Counties were rank ordered first by increasing age-adjusted death rate (calculated to 15 decimal places), second by decreasing size of the population. For purposes of this report, rates with a relative standard error of greater than or equal to 23% are considered "unreliable". The upper and lower limits of the age-adjusted death rate at the 95% confidence level indicate the precision of the estimated death rate. The wider the interval, the less precise the death rate. The upper and lower limits define the range within which the death rate probably would occur in 95 out of 100 independent sets of data similar to the present set. (See additional Technical Notes in the Appendix, pages 61 through 68).

DATA SOURCES

Department of Health Services: Death Statistical Master Files, 1996-1998.
Department of Finance: 1997 Race/Ethnic Population by County with Age and Sex Detail, June 1999.

TABLE 1
DEATHS DUE TO ALL CAUSES
RANKED BY THREE-YEAR AVERAGE AGE-ADJUSTED DEATH RATE
CALIFORNIA COUNTIES, 1996-1998

RANK ORDER	COUNTY	1997 POPULATION	1996-1998 DEATHS (AVERAGE)	CRUDE DEATH RATE	AGE-ADJUSTED DEATH RATE	95% CONFIDENCE LIMITS LOWER	UPPER
		YEAR 2000 NATIONAL OBJECTIVE:		**NONE ESTABLISHED**			
1	MONO	10,531	43.7	414.6	312.5	215.1	409.9
2	SAN BENITO	46,121	258.0	559.4	345.1	297.5	392.6
3	SAN MATEO	711,699	4,926.7	692.2	356.1	344.7	367.5
4	SANTA CLARA	1,671,414	8,876.3	531.1	356.6	348.7	364.6
5	SIERRA	3,406	31.7	929.7	358.6	198.3	518.9
6	NEVADA	88,356	817.0	924.7	358.9	326.4	391.4
7	MARIN	243,214	1,850.3	760.8	363.6	344.3	382.8
8	SANTA BARBARA	400,751	2,803.7	699.6	366.4	350.3	382.4
9	SANTA CRUZ	247,216	1,671.0	675.9	375.8	354.7	397.0
10	LASSEN	33,861	197.7	583.8	378.8	319.8	437.8
11	VENTURA	727,154	4,446.3	611.5	379.8	367.5	392.1
12	ORANGE	2,705,313	15,999.0	591.4	386.1	379.6	392.7
13	SAN LUIS OBISPO	234,813	1,934.3	823.8	392.4	370.9	413.9
14	MONTEREY	377,744	2,270.0	600.9	392.9	374.8	411.0
15	EL DORADO	147,409	1,051.7	713.4	395.0	368.2	421.9
16	AMADOR	33,472	351.0	1,048.6	402.5	349.1	455.9
17	PLACER	215,634	1,642.0	761.5	402.7	380.6	424.8
18	CONTRA COSTA	896,206	6,458.3	720.6	409.0	397.9	420.1
19	SAN DIEGO	2,763,401	18,594.7	672.9	416.1	409.3	423.0
20	MADERA	113,525	788.7	694.7	423.1	389.6	456.6
21	NAPA	121,239	1,278.0	1,054.1	425.6	396.4	454.8
	CALIFORNIA	**32,956,695**	**223,732.0**	**678.9**	**425.7**	**423.7**	**427.6**
22	SONOMA	432,771	3,697.0	854.3	428.1	411.5	444.6
23	LOS ANGELES	9,524,613	59,559.7	625.3	428.6	424.8	432.4
24	ALAMEDA	1,398,421	9,681.7	692.3	432.4	422.7	442.0
25	CALAVERAS	37,916	374.7	988.1	432.6	377.5	487.7
26	IMPERIAL	142,759	844.3	591.4	437.1	404.3	469.9
27	SAN FRANCISCO	777,368	6,961.3	895.5	439.4	426.9	451.8
28	TUOLUMNE	52,280	530.7	1,015.0	446.9	400.0	493.7
29	RIVERSIDE	1,423,699	11,350.7	797.3	448.4	438.7	458.1
30	GLENN	26,856	221.3	824.1	451.1	380.8	521.5
31	SUTTER	76,004	613.0	806.5	453.9	413.0	494.8
32	PLUMAS	20,402	213.3	1,045.6	453.9	375.2	532.7
33	FRESNO	778,674	5,265.7	676.2	454.1	440.3	468.0
34	YOLO	154,850	1,033.0	667.1	455.2	424.2	486.3
35	MARIPOSA	15,957	165.3	1,036.1	455.8	368.2	543.5
36	TEHAMA	54,702	569.7	1,041.4	459.7	413.3	506.2
37	INYO	18,272	226.0	1,236.9	460.2	382.4	538.0
38	COLUSA	18,530	144.7	780.7	462.2	375.0	549.3
39	BUTTE	198,459	2,144.7	1,080.7	465.3	439.9	490.7
40	SOLANO	378,664	2,352.3	621.2	474.2	453.9	494.5
41	SAN JOAQUIN	542,196	4,082.3	752.9	475.6	459.0	492.2
42	SACRAMENTO	1,146,825	8,633.3	752.8	478.9	467.7	490.1
43	ALPINE	1,174	8.3	709.8 *	482.8 *	129.1	836.5
44	TULARE	358,337	2,572.3	717.9	483.2	462.1	504.3
45	MODOC	10,140	116.7	1,150.6	486.3	371.3	601.4
46	MERCED	201,905	1,330.7	659.1	488.9	460.2	517.7
47	KERN	634,404	4,486.7	707.2	489.5	473.6	505.4
48	MENDOCINO	85,966	815.0	948.0	494.2	454.6	533.8
49	STANISLAUS	425,407	3,266.0	767.7	495.4	476.3	514.5
50	SAN BERNARDINO	1,617,262	10,516.0	650.2	500.5	490.1	510.8
51	SISKIYOU	44,186	490.0	1,108.9	502.4	448.2	556.6
52	KINGS	117,793	717.7	609.3	504.5	464.5	544.2
53	HUMBOLDT	126,137	1,139.0	903.0	515.5	481.2	549.8
54	DEL NORTE	28,413	253.0	890.4	517.3	443.5	591.1
55	SHASTA	163,351	1,668.0	1,021.1	519.4	490.4	548.4
56	LAKE	55,047	762.3	1,384.9	556.5	504.7	608.4
57	YUBA	61,246	480.3	784.3	561.1	505.9	616.4
58	TRINITY	13,230	155.3	1,174.1	595.4	483.9	706.9

TABLE 2: DEATHS DUE TO MOTOR VEHICLE CRASHES, 1996-1998

California Counties Ranked by Three-Year Average Age-Adjusted Death Rate

The crude death rate from motor vehicle crashes for California was 11.5 per 100,000 population, a risk of dying equivalent to approximately one death for every 8,702 persons. This rate was based on a three-year average number of deaths of 3,787.3 from 1996 to 1998 and a population of 32,956,695 as of July 1, 1997. Among counties with "reliable" rates, the crude rate ranged from 28.8 in Madera County to 6.0 in San Mateo County, a difference in rates by a factor of 4.8 to 1.

The age-adjusted death rate from motor vehicle crashes for California for the three-year period from 1996 to 1998 was 11.4 per 100,000 population. Reliable age-adjusted death rates ranged from 27.7 in Madera County to 5.7 in San Mateo County. The difference between crude and age-adjusted rates shows how the county age composition differs from the 1940 United States population.

Altogether 22 counties (17 with reliable age-adjusted death rates) and California as a whole met the revised Year 2000 National Objective of 14.2 deaths due to motor vehicle crashes per 100,000 population.

Notes:

Death rates are per 100,000 population. The crude death rate is the actual risk of dying. The age-adjusted rate is the hypothetical rate that the State/County would have if its population were distributed by age in the same proportions as the 1940 United States population.

*   Death rate unreliable, relative standard error is greater than or equal to 23%.
\+   Standard error indeterminate, death rate based on no (zero) deaths.
\-   Upper and lower limits at the 95% confidence level are not calculated for no (zero) deaths.

Counties were rank ordered first by increasing age-adjusted death rate (calculated to 15 decimal places), second by decreasing size of the population. For purposes of this report, rates with a relative standard error of greater than or equal to 23% are considered "unreliable". The upper and lower limits of the age-adjusted death rate at the 95% confidence level indicate the precision of the estimated death rate. The wider the interval, the less precise the death rate. The upper and lower limits define the range within which the death rate probably would occur in 95 out 100 independent sets of data similar to the present set. (See Technical Notes in the Appendix, pages 61 through 68).

DATA SOURCES

Department of Health Services: Death Statistical Master Files, 1996-1998.
Department of Finance: 1997 Race/Ethnic Population by County with Age and Sex Detail, June 1999.

TABLE 2
DEATHS DUE TO MOTOR VEHICLE CRASHES
RANKED BY THREE-YEAR AVERAGE AGE-ADJUSTED DEATH RATE
CALIFORNIA COUNTIES, 1996-1998

RANK ORDER	COUNTY	1997 POPULATION	1996-1998 DEATHS (AVERAGE)	CRUDE DEATH RATE	AGE-ADJUSTED DEATH RATE	95% CONFIDENCE LIMITS LOWER	95% CONFIDENCE LIMITS UPPER
1	SIERRA	3,406	0.0	0.0 +	0.0 +	-	-
2	SAN MATEO	711,699	42.7	6.0	5.7	3.9	7.6
3	MARIN	243,214	16.7	6.9 *	6.6 *	3.1	10.2
4	SAN FRANCISCO	777,368	57.7	7.4	7.0	4.9	9.0
5	ALAMEDA	1,398,421	104.0	7.4	7.3	5.8	8.8
6	SANTA CLARA	1,671,414	133.3	8.0	8.1	6.7	9.6
7	ORANGE	2,705,313	220.0	8.1	8.2	7.1	9.4
8	CONTRA COSTA	896,206	79.0	8.8	8.8	6.8	10.8
9	NAPA	121,239	11.3	9.3 *	9.0 *	3.3	14.6
10	SANTA BARBARA	400,751	37.7	9.4	9.1	6.0	12.1
11	SAN DIEGO	2,763,401	265.3	9.6	9.2	8.1	10.4
12	LOS ANGELES	9,524,613	887.7	9.3	9.3	8.6	9.9
13	VENTURA	727,154	71.0	9.8	9.6	7.3	11.9
14	YOLO	154,850	17.3	11.2 *	10.3 *	5.3	15.3
15	SANTA CRUZ	247,216	27.3	11.1	10.8	6.5	15.1
	CALIFORNIA	**32,956,695**	**3,787.3**	**11.5**	**11.4**	**11.0**	**11.8**
16	SOLANO	378,664	42.3	11.2	11.6	8.0	15.1
17	SAN LUIS OBISPO	234,813	29.7	12.6	11.6	7.2	15.9
18	SACRAMENTO	1,146,825	137.7	12.0	12.0	9.9	14.1
19	SONOMA	432,771	54.3	12.6	12.2	8.7	15.6
20	MONTEREY	377,744	46.7	12.4	12.3	8.7	15.9
21	PLACER	215,634	27.3	12.7	12.9	7.7	18.0
22	LAKE	55,047	8.0	14.5 *	12.9 *	2.6	23.1
	YEAR 2000 NATIONAL OBJECTIVE:				**14.2**		
23	SAN BERNARDINO	1,617,262	237.0	14.7	15.0	13.1	17.0
24	EL DORADO	147,409	23.7	16.1	15.3	8.7	21.9
25	NEVADA	88,356	13.3	15.1 *	16.2 *	6.7	25.6
26	SAN JOAQUIN	542,196	88.7	16.4	16.4	12.9	19.9
27	PLUMAS	20,402	4.7	22.9 *	17.4 *	0.0	34.8
28	RIVERSIDE	1,423,699	248.0	17.4	17.5	15.2	19.7
29	KERN	634,404	109.0	17.2	17.5	14.2	20.9
30	LASSEN	33,861	6.3	18.7 *	18.1 *	3.8	32.4
31	STANISLAUS	425,407	80.0	18.8	18.6	14.4	22.8
32	SHASTA	163,351	31.3	19.2	19.1	12.1	26.1
33	TUOLUMNE	52,280	12.3	23.6 *	19.9 *	7.7	32.1
34	SAN BENITO	46,121	9.0	19.5 *	20.0 *	6.8	33.2
35	HUMBOLDT	126,137	25.7	20.3	20.1	11.9	28.2
36	SISKIYOU	44,186	8.3	18.9 *	20.9 *	5.8	35.9
37	KINGS	117,793	25.0	21.2	21.2	12.7	29.6
38	ALPINE	1,174	0.3	28.4 *	22.0 *	0.0	96.7
39	SUTTER	76,004	16.7	21.9 *	22.0 *	11.1	32.9
40	MERCED	201,905	43.7	21.6	22.4	15.7	29.2
41	BUTTE	198,459	43.7	22.0	22.8	15.7	30.0
42	FRESNO	778,674	173.7	22.3	22.8	19.4	26.3
43	MODOC	10,140	2.0	19.7 *	23.0 *	0.0	58.2
44	MENDOCINO	85,966	20.3	23.7	23.1 *	12.5	33.6
45	AMADOR	33,472	8.3	24.9 *	23.2 *	4.9	41.4
46	TEHAMA	54,702	13.0	23.8 *	23.2 *	9.7	36.7
47	YUBA	61,246	13.7	22.3 *	23.7 *	10.9	36.5
48	IMPERIAL	142,759	36.3	25.5	24.3	16.0	32.5
49	COLUSA	18,530	4.7	25.2 *	24.4 *	1.5	47.3
50	MONO	10,531	3.0	28.5 *	25.6 *	0.0	55.2
51	TULARE	358,337	90.3	25.2	25.9	20.4	31.3
52	MADERA	113,525	32.7	28.8	27.7	17.9	37.5
53	CALAVERAS	37,916	10.0	26.4 *	29.0 *	8.8	49.1
54	INYO	18,272	6.0	32.8 *	29.2 *	1.4	56.9
55	GLENN	26,856	8.3	31.0 *	31.7 *	9.7	53.7
56	TRINITY	13,230	3.7	27.7 *	33.1 *	0.0	68.9
57	DEL NORTE	28,413	10.7	37.5 *	36.0 *	13.2	58.7
58	MARIPOSA	15,957	7.0	43.9 *	37.5 *	5.8	69.2

TABLE 3: DEATHS DUE TO UNINTENTIONAL INJURIES, 1996-1998

California Counties Ranked by Three-Year Average Age-Adjusted Death Rate

The crude death rate from unintentional injuries for California was 26.9 per 100,000 population, a risk of dying equivalent to approximately one death for every 3,717 persons. This rate was based on a three-year average number of deaths of 8,866.3 from 1996 to 1998 and a population of 32,956,695 as of July 1, 1997. Among counties with "reliable" rates, the crude rate ranged from 70.4 in Del Norte County to 18.6 in Santa Clara County, a difference in rates by a factor of 3.8 to 1.

The age-adjusted death rate from unintentional injuries for California for the three-year period from 1996 to 1998 was 24.2 per 100,000 population. Reliable age-adjusted death rates ranged from 49.3 in Humboldt County to 15.6 in Marin County. The difference between crude and age-adjusted rates shows how the county age composition differs from the 1940 United States population.

Altogether 22 counties (20 with reliable age-adjusted death rates) and California as a whole met the Year 2000 National Objective of 29.3 deaths due to unintentional injuries per 100,000 population.

Notes:

Death rates are per 100,000 population. The crude death rate is the actual risk of dying. The age-adjusted rate is the hypothetical rate that the State/County would have if its population were distributed by age in the same proportions as the 1940 United States population.

*   Death rate unreliable, relative standard error is greater than or equal to 23%.

Counties were rank ordered first by increasing age-adjusted death rate (calculated to 15 decimal places), second by decreasing size of the population. For purposes of this report, rates with a relative standard error of greater than or equal to 23% are considered "unreliable". The upper and lower limits of the age-adjusted death rate at the 95% confidence level indicate the precision of the estimated death rate. The wider the interval, the less precise the death rate. The upper and lower limits define the range within which the death rate probably would occur in 95 out 100 independent sets of data similar to the present set. (See Technical Notes in the Appendix, pages 61 through 68).

DATA SOURCES

Department of Health Services: Death Statistical Master Files, 1996-1998.
Department of Finance: 1997 Race/Ethnic Population by County with Age and Sex Detail, June 1999.

TABLE 3
DEATHS DUE TO UNINTENTIONAL INJURIES
RANKED BY THREE-YEAR AVERAGE AGE-ADJUSTED DEATH RATE
CALIFORNIA COUNTIES, 1996-1998

RANK ORDER	COUNTY	1997 POPULATION	1996-1998 DEATHS (AVERAGE)	CRUDE DEATH RATE	AGE-ADJUSTED DEATH RATE	95% CONFIDENCE LIMITS LOWER	95% CONFIDENCE LIMITS UPPER
1	MARIN	243,214	51.7	21.2	15.6	10.7	20.6
2	SAN MATEO	711,699	137.7	19.3	16.0	13.1	19.0
3	SANTA CLARA	1,671,414	311.0	18.6	17.0	15.0	19.0
4	ORANGE	2,705,313	565.0	20.9	18.8	17.1	20.4
5	LOS ANGELES	9,524,613	2,059.0	21.6	20.2	19.3	21.1
6	ALAMEDA	1,398,421	323.3	23.1	20.2	17.9	22.6
7	CONTRA COSTA	896,206	208.0	23.2	20.3	17.4	23.3
8	NAPA	121,239	33.3	27.5	21.0	12.8	29.3
9	ALPINE	1,174	0.3	28.4 *	22.0 *	0.0	96.7
10	VENTURA	727,154	188.7	25.9	22.5	19.1	25.9
11	SAN DIEGO	2,763,401	699.0	25.3	22.7	20.9	24.5
12	SANTA CRUZ	247,216	66.3	26.8	23.6	17.5	29.8
13	YOLO	154,850	45.0	29.1	24.2	16.7	31.8
	CALIFORNIA	**32,956,695**	**8,866.3**	**26.9**	**24.2**	**23.7**	**24.7**
14	PLACER	215,634	62.3	28.9	24.6	17.9	31.3
15	SANTA BARBARA	400,751	129.7	32.4	24.8	20.1	29.6
16	SONOMA	432,771	126.0	29.1	25.2	20.4	30.0
17	SACRAMENTO	1,146,825	317.0	27.6	25.2	22.3	28.2
18	SOLANO	378,664	101.7	26.8	25.2	20.1	30.3
19	SAN BERNARDINO	1,617,262	427.3	26.4	25.6	23.1	28.1
20	PLUMAS	20,402	7.7	37.6 *	26.4 *	4.3	48.4
21	MONTEREY	377,744	107.0	28.3	26.5	21.3	31.8
22	SAN LUIS OBISPO	234,813	84.7	36.1	28.6	21.8	35.3
	YEAR 2000 NATIONAL OBJECTIVE:				**29.3**		
23	LASSEN	33,861	11.7	34.5 *	29.8 *	11.8	47.7
24	SAN FRANCISCO	777,368	295.3	38.0	29.9	26.1	33.7
25	NEVADA	88,356	33.0	37.3	31.2	18.6	43.8
26	RIVERSIDE	1,423,699	487.7	34.3	31.5	28.5	34.5
27	LAKE	55,047	23.7	43.0	31.8 *	16.4	47.3
28	EL DORADO	147,409	53.7	36.4	32.2	22.9	41.4
29	AMADOR	33,472	14.3	42.8 *	32.7 *	12.0	53.4
30	SIERRA	3,406	1.0	29.4 *	33.5 *	0.0	110.3
31	SAN JOAQUIN	542,196	201.0	37.1	34.0	29.1	38.9
32	TEHAMA	54,702	24.0	43.9	35.7 *	19.5	51.8
33	STANISLAUS	425,407	165.0	38.8	35.7	30.0	41.5
34	SUTTER	76,004	31.7	41.7	36.6	23.0	50.2
35	MERCED	201,905	76.3	37.8	37.0	28.4	45.5
36	TUOLUMNE	52,280	25.0	47.8	37.4	20.9	53.9
37	KERN	634,404	250.0	39.4	37.4	32.6	42.2
38	MONO	10,531	4.3	41.1 *	37.4 *	1.1	73.7
39	FRESNO	778,674	309.3	39.7	37.8	33.5	42.2
40	SISKIYOU	44,186	20.0	45.3	38.1 *	19.1	57.0
41	KINGS	117,793	47.7	40.5	38.3	27.1	49.5
42	SAN BENITO	46,121	19.3	41.9	40.5 *	21.9	59.2
43	SHASTA	163,351	79.3	48.6	41.2	31.1	51.2
44	BUTTE	198,459	96.7	48.7	41.8	32.4	51.1
45	MADERA	113,525	54.0	47.6	42.2	30.2	54.1
46	CALAVERAS	37,916	17.7	46.6 *	43.2 *	19.8	66.6
47	TULARE	358,337	165.3	46.1	44.8	37.7	51.9
48	IMPERIAL	142,759	84.0	58.8	46.0	34.6	57.4
49	MENDOCINO	85,966	45.3	52.7	46.4	31.6	61.2
50	MODOC	10,140	7.0	69.0 *	46.6 *	2.4	90.8
51	GLENN	26,856	15.0	55.9 *	46.7 *	20.8	72.6
52	YUBA	61,246	29.3	47.9	46.9	29.3	64.4
53	COLUSA	18,530	10.3	55.8 *	48.3 *	16.3	80.3
54	HUMBOLDT	126,137	66.0	52.3	49.3	36.8	61.8
55	INYO	18,272	12.0	65.7 *	52.1 *	17.2	86.9
56	TRINITY	13,230	8.0	60.5 *	54.4 *	12.3	96.6
57	MARIPOSA	15,957	10.7	66.8 *	61.5 *	20.3	102.8
58	DEL NORTE	28,413	20.0	70.4	61.8 *	32.6	90.9

TABLE 4: DEATHS DUE TO FIREARM INJURIES, 1996-1998

California Counties Ranked by Three-Year Average Age-Adjusted Death Rate

The crude death rate from firearm injuries for California was 11.2 per 100,000 population, a risk of dying equivalent to approximately one death for every 8,933 persons. This rate was based on a three-year average number of deaths of 3,689.3 from 1996 to 1998 and a population of 32,956,695 as of July 1, 1997. Among counties with "reliable" rates, the crude rate ranged from 17.3 in Shasta County to 5.0 in Santa Clara County, a difference in rates by a factor of 3.5 to 1.

The age-adjusted death rate from firearm injuries for California for the three-year period from 1996 to 1998 was 11.6 per 100,000 population. Reliable age-adjusted death rates ranged from 16.3 in Los Angeles County to 5.2 in Santa Clara County. The difference between crude and age-adjusted rates shows how the county age composition differs from the 1940 United States population.

Altogether 32 counties (14 with reliable age-adjusted death rates) and California as a whole met the Year 2000 National Objective of 11.6 deaths due to firearm-related injuries per 100,000 population.

Notes:

This Year 2000 National Objective was revised from weapon-related deaths to firearm-related deaths. Death rates are per 100,000 population. The crude death rate is the actual risk of dying. The age-adjusted rate is the hypothetical rate that the State/County would have if its population were distributed by age in the same proportions as the 1940 United States population.

*   Death rate unreliable, relative standard error is greater than or equal to 23%.

Counties were rank ordered first by increasing age-adjusted death rate (calculated to 15 decimal places), second by decreasing size of the population. For purposes of this report, rates with a relative standard error of greater than or equal to 23% are considered "unreliable". The upper and lower limits of the age-adjusted death rate at the 95% confidence level indicate the precision of the estimated death rate. The wider the interval, the less precise the death rate. The upper and lower limits define the range within which the death rate probably would occur in 95 out 100 independent sets of data similar to the present set. (See Technical Notes in the Appendix, pages 61 through 68).

DATA SOURCES

Department of Health Services: Death Statistical Master Files, 1996-1998.
Department of Finance: 1997 Race/Ethnic Population by County with Age and Sex Detail, June 1999.

RANK ORDER	COUNTY	1997 POPULATION	1996-1998 DEATHS (AVERAGE)	CRUDE DEATH RATE	AGE-ADJUSTED DEATH RATE	95% CONFIDENCE LIMITS LOWER	95% CONFIDENCE LIMITS UPPER
1	SAN BENITO	46,121	1.7	3.6 *	3.2 *	0.0	8.2
2	MARIN	243,214	14.3	5.9 *	4.6 *	1.9	7.4
3	MONO	10,531	0.7	6.3 *	5.1 *	0.0	17.4
4	SANTA CLARA	1,671,414	83.7	5.0	5.2	4.0	6.3
5	NAPA	121,239	8.7	7.1 *	5.7 *	1.4	9.9
6	SAN MATEO	711,699	47.7	6.7	6.3	4.4	8.3
7	SANTA CRUZ	247,216	17.3	7.0 *	6.5 *	3.2	9.8
8	SANTA BARBARA	400,751	29.3	7.3	6.5	4.0	9.0
9	ORANGE	2,705,313	188.0	6.9	7.4	6.3	8.5
10	SONOMA	432,771	35.7	8.2	7.7	4.9	10.4
11	IMPERIAL	142,759	11.0	7.7 *	7.7 *	3.1	12.3
12	PLACER	215,634	19.7	9.1	7.9 *	4.3	11.6
13	GLENN	26,856	2.3	8.7 *	8.1 *	0.0	19.1
14	TUOLUMNE	52,280	6.3	12.1 *	8.2 *	0.8	15.7
15	SAN DIEGO	2,763,401	239.3	8.7	8.3	7.2	9.4
16	SAN FRANCISCO	777,368	62.7	8.1	8.3	6.0	10.6
17	AMADOR	33,472	4.3	12.9 *	8.4 *	0.0	17.3
18	SAN LUIS OBISPO	234,813	23.3	9.9	8.5	4.8	12.2
19	YOLO	154,850	14.0	9.0 *	8.6 *	4.0	13.3
20	VENTURA	727,154	64.3	8.8	8.7	6.5	10.8
21	LASSEN	33,861	3.0	8.9 *	8.7 *	0.0	18.6
22	DEL NORTE	28,413	3.3	11.7 *	8.9 *	0.0	19.3
23	MERCED	201,905	18.0	8.9 *	9.4 *	5.0	13.8
24	NEVADA	88,356	11.0	12.4 *	9.7 *	3.1	16.3
25	KINGS	117,793	12.0	10.2 *	10.1 *	4.3	15.8
26	EL DORADO	147,409	18.0	12.2 *	10.1 *	5.1	15.1
27	TULARE	358,337	35.0	9.8	10.3	6.8	13.7
28	SOLANO	378,664	38.0	10.0	10.3	6.9	13.6
29	STANISLAUS	425,407	44.0	10.3	10.4	7.2	13.5
30	INYO	18,272	2.7	14.6 *	10.9 *	0.0	24.6
31	MONTEREY	377,744	39.7	10.5	11.1	7.5	14.7
32	ALAMEDA	1,398,421	154.3	11.0	11.6	9.7	13.5
	CALIFORNIA	**32,956,695**	**3,689.3**	**11.2**	**11.6**	**11.3**	**12.0**
	YEAR 2000 NATIONAL OBJECTIVE:				11.6		
33	TEHAMA	54,702	6.7	12.2 *	11.8 *	2.0	21.5
34	HUMBOLDT	126,137	16.0	12.7 *	12.0 *	5.9	18.1
35	CONTRA COSTA	896,206	102.3	11.4	12.0	9.6	14.4
36	MADERA	113,525	14.0	12.3 *	12.2 *	5.6	18.7
37	RIVERSIDE	1,423,699	172.7	12.1	12.4	10.4	14.3
38	SACRAMENTO	1,146,825	140.0	12.2	12.4	10.3	14.6
39	MODOC	10,140	1.3	13.1 *	13.0 *	0.0	35.4
40	LAKE	55,047	9.0	16.3 *	13.0 *	3.3	22.7
41	BUTTE	198,459	28.7	14.4	13.0	7.8	18.2
42	MENDOCINO	85,966	13.3	15.5 *	13.1 *	5.6	20.6
43	KERN	634,404	80.3	12.7	13.4	10.4	16.4
44	FRESNO	778,674	100.3	12.9	13.5	10.8	16.2
45	SISKIYOU	44,186	7.3	16.6 *	13.9 *	2.9	24.8
46	CALAVERAS	37,916	6.7	17.6 *	14.1 *	1.9	26.3
47	SAN BERNARDINO	1,617,262	216.7	13.4	14.2	12.3	16.1
48	SUTTER	76,004	11.3	14.9 *	14.2 *	5.6	22.9
49	COLUSA	18,530	3.7	19.8 *	14.3 *	0.0	30.9
50	YUBA	61,246	9.3	15.2 *	14.4 *	4.8	24.0
51	SAN JOAQUIN	542,196	74.0	13.6	14.5	11.1	17.9
52	SIERRA	3,406	0.7	19.6 *	15.0 *	0.0	51.1
53	TRINITY	13,230	3.0	22.7 *	15.1 *	0.0	37.0
54	SHASTA	163,351	28.3	17.3	15.6	9.5	21.8
55	PLUMAS	20,402	3.3	16.3 *	15.9 *	0.0	34.5
56	LOS ANGELES	9,524,613	1,382.7	14.5	16.3	15.4	17.2
57	MARIPOSA	15,957	4.0	25.1 *	21.9 *	0.0	46.3
58	ALPINE	1,174	0.3	28.4 *	22.0 *	0.0	96.7

TABLE 5: DEATHS DUE TO HOMICIDE, 1996-1998

California Counties Ranked by Three-Year Average Age-Adjusted Death Rate

The crude death rate from homicide for California was 8.1 per 100,000 population, a risk of dying equivalent to approximately one death for every 12,279 persons. This rate was based on a three-year average number of deaths of 2,684.0 from 1996 to 1998 and a population of 32,956,695 as of July 1, 1997. Among counties with "reliable" rates, the crude rate ranged from 12.8 in Los Angeles County to 3.0 in Santa Clara County, a difference in rates by a factor of 4.3 to 1.

The age-adjusted death rate from homicide for California for the three-year period from 1996 to 1998 was 9.0 per 100,000 population. Reliable age-adjusted death rates ranged from 14.7 in Los Angeles County to 3.4 in Santa Clara County. The difference between crude and age-adjusted rates shows how the county age composition differs from the 1940 United States population.

Altogether 35 counties (6 with reliable age-adjusted death rates), but not California, met the Year 2000 National Objective of 7.2 deaths due to homicide per 100,000 population.

Notes:

Death rates are per 100,000 population. The crude death rate is the actual risk of dying. The age-adjusted rate is the hypothetical rate that the State/County would have if its population were distributed by age in the same proportions as the 1940 United States population.

*   Death rate unreliable, relative standard error is greater than or equal to 23%.
+   Standard error indeterminate, death rate based on no (zero) deaths.
-      Upper and lower limits at the 95% confidence level are not calculated for no (zero) deaths.

Counties were rank ordered first by increasing age-adjusted death rate (calculated to 15 decimal places), second by decreasing size of the population. For purposes of this report, rates with a relative standard error of greater than or equal to 23% are considered "unreliable". The upper and lower limits of the age-adjusted death rate at the 95% confidence level indicate the precision of the estimated death rate. The wider the interval, the less precise the death rate. The upper and lower limits define the range within which the death rate probably would occur in 95 out 100 independent sets of data similar to the present set. (See Technical Notes in the Appendix, pages 61 through 68).

DATA SOURCES

Department of Health Services: Death Statistical Master Files, 1996-1998.
Department of Finance: 1997 Race/Ethnic Population by County with Age and Sex Detail, June 1999.

TABLE 5
DEATHS DUE TO HOMICIDE
RANKED BY THREE-YEAR AVERAGE AGE-ADJUSTED DEATH RATE
CALIFORNIA COUNTIES, 1996-1998

RANK ORDER	COUNTY	1997 POPULATION	1996-1998 DEATHS (AVERAGE)	CRUDE DEATH RATE	AGE-ADJUSTED DEATH RATE	95% CONFIDENCE LIMITS LOWER	UPPER
1	MODOC	10,140	0.0	0.0 +	0.0 +	-	-
2	SIERRA	3,406	0.0	0.0 +	0.0 +	-	-
3	ALPINE	1,174	0.0	0.0 +	0.0 +	-	-
4	TUOLUMNE	52,280	1.0	1.9 *	1.5 *	0.0	5.0
5	MARIN	243,214	3.0	1.2 *	1.6 *	0.0	3.6
6	SAN BENITO	46,121	0.7	1.4 *	1.7 *	0.0	5.8
7	EL DORADO	147,409	3.0	2.0 *	1.8 *	0.0	4.1
8	NAPA	121,239	2.0	1.6 *	2.1 *	0.0	5.0
9	PLACER	215,634	5.3	2.5 *	2.4 *	0.3	4.6
10	CALAVERAS	37,916	1.0	2.6 *	2.7 *	0.0	8.0
11	GLENN	26,856	1.0	3.7 *	2.7 *	0.0	8.7
12	LASSEN	33,861	1.0	3.0 *	2.7 *	0.0	8.1
13	SAN LUIS OBISPO	234,813	6.7	2.8 *	2.9 *	0.6	5.2
14	AMADOR	33,472	0.7	2.0 *	3.0 *	0.0	10.3
15	SONOMA	432,771	12.0	2.8 *	3.1 *	1.3	4.9
16	SANTA CLARA	1,671,414	50.7	3.0	3.4	2.4	4.3
17	MONO	10,531	0.3	3.2 *	3.5 *	0.0	15.4
18	INYO	18,272	0.3	1.8 *	3.5 *	0.0	15.4
19	SANTA CRUZ	247,216	8.7	3.5 *	3.7 *	1.1	6.3
20	YOLO	154,850	6.0	3.9 *	4.0 *	0.8	7.2
21	SANTA BARBARA	400,751	16.0	4.0 *	4.0 *	2.0	6.0
22	SAN MATEO	711,699	27.0	3.8	4.1	2.5	5.8
23	NEVADA	88,356	3.0	3.4 *	4.2 *	0.0	9.3
24	HUMBOLDT	126,137	5.0	4.0 *	4.4 *	0.5	8.2
25	ORANGE	2,705,313	107.0	4.0	4.6	3.7	5.5
26	VENTURA	727,154	30.7	4.2	4.7	3.0	6.4
27	SAN DIEGO	2,763,401	137.7	5.0	5.0	4.2	5.9
28	SISKIYOU	44,186	2.0	4.5 *	5.0 *	0.0	12.2
29	SUTTER	76,004	4.0	5.3 *	5.3 *	0.0	10.7
30	SHASTA	163,351	9.0	5.5 *	5.7 *	1.8	9.5
31	YUBA	61,246	3.3	5.4 *	5.8 *	0.0	12.1
32	BUTTE	198,459	10.0	5.0 *	5.8 *	2.1	9.5
33	COLUSA	18,530	1.0	5.4 *	6.0 *	0.0	17.7
34	SOLANO	378,664	23.0	6.1	6.6	3.8	9.3
35	LAKE	55,047	3.7	6.7 *	7.0 *	0.0	15.3
	YEAR 2000 NATIONAL OBJECTIVE:				**7.2**		
36	MERCED	201,905	14.0	6.9 *	7.4 *	3.5	11.3
37	IMPERIAL	142,759	10.3	7.2 *	7.4 *	2.8	12.0
38	SAN FRANCISCO	777,368	52.3	6.7	7.5	5.2	9.7
39	KINGS	117,793	9.0	7.6 *	7.5 *	2.6	12.4
40	PLUMAS	20,402	1.3	6.5 *	7.5 *	0.0	21.3
41	TEHAMA	54,702	3.3	6.1 *	7.8 *	0.0	16.3
42	DEL NORTE	28,413	2.3	8.2 *	7.8 *	0.0	18.2
43	STANISLAUS	425,407	32.7	7.7	8.2	5.3	11.0
44	TULARE	358,337	27.0	7.5	8.2	5.1	11.3
45	RIVERSIDE	1,423,699	113.7	8.0	8.9	7.2	10.5
46	CONTRA COSTA	896,206	70.0	7.8	8.9	6.8	11.0
47	SACRAMENTO	1,146,825	92.0	8.0	9.0	7.1	10.9
	CALIFORNIA	**32,956,695**	**2,684.0**	**8.1**	**9.0**	**8.6**	**9.3**
48	MENDOCINO	85,966	8.0	9.3 *	9.5 *	2.7	16.3
49	MONTEREY	377,744	32.3	8.6	9.5	6.2	12.9
50	KERN	634,404	59.3	9.4	10.2	7.6	12.8
51	FRESNO	778,674	77.0	9.9	10.4	8.0	12.7
52	MADERA	113,525	11.3	10.0 *	10.5 *	4.3	16.7
53	SAN BERNARDINO	1,617,262	161.0	10.0	10.8	9.1	12.5
54	ALAMEDA	1,398,421	140.3	10.0	10.9	9.1	12.8
55	SAN JOAQUIN	542,196	56.7	10.5	11.4	8.4	14.5
56	MARIPOSA	15,957	1.3	8.4 *	11.8 *	0.0	32.3
57	TRINITY	13,230	1.3	10.1 *	12.5 *	0.0	36.1
58	LOS ANGELES	9,524,613	1,221.7	12.8	14.7	13.8	15.5

TABLE 6: DEATHS DUE TO SUICIDE, 1996-1998

California Counties Ranked by Three-Year Average Age-Adjusted Death Rate

The crude death rate from suicide for California was 10.2 per 100,000 population, a risk of dying equivalent to approximately one death for every 9,841 persons. This rate was based on a three-year average number of deaths of 3,349.0 from 1996 to 1998, and a population of 32,956,695 as of July 1, 1997. Among counties with "reliable" rates, the crude rate ranged from 20.8 in Shasta County to 7.1 in Tulare County, a difference in rates by a factor of 2.9 to 1.

The age-adjusted death rate from suicide for California for the three-year period from 1996 to 1998 was 9.4 per 100,000 population. Reliable age-adjusted death rates ranged from 19.2 in Shasta County to 7.1 in Tulare County. The difference between the crude rate and the age-adjusted rate shows how the county age composition differs from the 1940 United States population.

Altogether 29 counties (18 with reliable age-adjusted death rates) and California as a whole met the Year 2000 National Objective of 10.5 deaths due to suicide per 100,000 population.

Notes:

Death rates are per 100,000 population. The crude death rate is the actual risk of dying. The age-adjusted rate is the hypothetical rate that the State/County would have if its population were distributed by age in the same proportions as the 1940 United States population.

*   Death rate unreliable, relative standard error is greater than or equal to 23%.

Counties were rank ordered first by increasing age-adjusted death rate (calculated to 15 decimal places), second by decreasing size of the population. For purposes of this report, rates with a relative standard error of greater than or equal to 23% are considered "unreliable". The upper and lower limits of the age-adjusted death rate at the 95% confidence level indicate the precision of the estimated death rate. The wider the interval, the less precise the death rate. The upper and lower limits define the range within which the death rate probably would occur in 95 out 100 independent sets of data similar to the present set. (See Technical Notes in the Appendix, pages 61 through 68).

DATA SOURCES

Department of Health Services: Death Statistical Master Files, 1996-1998.
Department of Finance: 1997 Race/Ethnic Population by County with Age and Sex Detail, June 1999.

TABLE 6
DEATHS DUE TO SUICIDE
RANKED BY THREE-YEAR AVERAGE AGE-ADJUSTED DEATH RATE
CALIFORNIA COUNTIES, 1996-1998

RANK ORDER	COUNTY	1997 POPULATION	1996-1998 DEATHS (AVERAGE)	CRUDE DEATH RATE	AGE-ADJUSTED DEATH RATE	95% CONFIDENCE LIMITS LOWER	UPPER
1	IMPERIAL	142,759	8.0	5.6 *	5.5 *	1.6	9.3
2	SAN BENITO	46,121	3.0	6.5 *	6.4 *	0.0	13.9
3	TULARE	358,337	25.3	7.1	7.1	4.3	10.0
4	SANTA CLARA	1,671,414	134.0	8.0	7.5	6.2	8.8
5	KINGS	117,793	9.0	7.6 *	7.7 *	2.6	12.9
6	MADERA	113,525	9.0	7.9 *	7.8 *	2.6	13.0
7	MERCED	201,905	15.7	7.8 *	7.9 *	3.9	11.8
8	ORANGE	2,705,313	227.3	8.4	7.9	6.8	9.0
9	LOS ANGELES	9,524,613	814.3	8.5	8.2	7.7	8.8
10	ALAMEDA	1,398,421	130.7	9.3	8.3	6.8	9.8
11	CONTRA COSTA	896,206	89.0	9.9	8.8	6.8	10.7
12	COLUSA	18,530	2.3	12.6 *	8.9 *	0.0	21.7
13	TRINITY	13,230	2.7	20.2 *	9.1 *	0.0	22.3
14	DEL NORTE	28,413	3.3	11.7 *	9.1 *	0.0	19.7
15	SAN MATEO	711,699	72.7	10.2	9.1	6.9	11.4
16	FRESNO	778,674	71.3	9.2	9.2	7.0	11.4
	CALIFORNIA	**32,956,695**	**3,349.0**	**10.2**	**9.4**	**9.1**	**9.8**
17	SAN JOAQUIN	542,196	55.3	10.2	9.7	7.0	12.3
18	STANISLAUS	425,407	43.7	10.3	9.7	6.7	12.7
19	MONO	10,531	1.3	12.7 *	9.7 *	0.0	27.1
20	SAN BERNARDINO	1,617,262	159.3	9.9	9.8	8.2	11.3
21	VENTURA	727,154	79.3	10.9	9.8	7.6	12.1
22	NAPA	121,239	14.7	12.1 *	9.9 *	4.3	15.4
23	TUOLUMNE	52,280	7.3	14.0 *	9.9 *	1.8	18.1
24	MARIN	243,214	32.7	13.4	10.0	6.2	13.7
25	SANTA BARBARA	400,751	46.3	11.6	10.0	7.0	13.0
26	SANTA CRUZ	247,216	27.3	11.1	10.0	6.0	14.0
27	MONTEREY	377,744	39.0	10.3	10.0	6.8	13.3
28	KERN	634,404	65.0	10.2	10.3	7.7	12.8
29	SOLANO	378,664	41.7	11.0	10.5	7.2	13.8
	YEAR 2000 NATIONAL OBJECTIVE:				**10.5**		
30	TEHAMA	54,702	7.0	12.8 *	10.6 *	1.8	19.4
31	RIVERSIDE	1,423,699	164.7	11.6	10.8	9.1	12.6
32	YOLO	154,850	17.7	11.4 *	10.9 *	5.7	16.1
33	SAN DIEGO	2,763,401	328.7	11.9	11.1	9.9	12.4
34	SAN LUIS OBISPO	234,813	30.3	12.9	11.3	7.0	15.5
35	SAN FRANCISCO	777,368	110.0	14.2	11.3	9.0	13.6
36	SACRAMENTO	1,146,825	142.3	12.4	11.3	9.4	13.3
37	GLENN	26,856	3.0	11.2 *	12.0 *	0.0	26.2
38	LASSEN	33,861	4.3	12.8 *	12.1 *	0.6	23.6
39	PLACER	215,634	29.0	13.4	12.1	7.5	16.8
40	NEVADA	88,356	13.7	15.5 *	12.4 *	4.9	19.8
41	AMADOR	33,472	5.3	15.9 *	12.6 *	0.4	24.8
42	SONOMA	432,771	60.7	14.0	12.6	9.2	16.0
43	MARIPOSA	15,957	3.3	20.9 *	12.9 *	0.0	27.9
44	SUTTER	76,004	11.3	14.9 *	14.1 *	5.6	22.6
45	YUBA	61,246	9.7	15.8 *	14.6 *	5.0	24.2
46	PLUMAS	20,402	3.7	18.0 *	14.6 *	0.0	30.6
47	BUTTE	198,459	34.7	17.5	14.9	9.4	20.3
48	INYO	18,272	3.3	18.2 *	15.0 *	0.0	32.0
49	HUMBOLDT	126,137	22.3	17.7	15.7	8.9	22.5
50	EL DORADO	147,409	27.3	18.5	16.2	9.7	22.6
51	MODOC	10,140	1.3	13.1 *	17.2 *	0.0	47.7
52	SISKIYOU	44,186	9.0	20.4 *	17.7 *	5.2	30.2
53	MENDOCINO	85,966	18.0	20.9 *	17.7 *	9.0	26.5
54	CALAVERAS	37,916	8.7	22.9 *	18.4 *	4.9	31.8
55	SHASTA	163,351	34.0	20.8	19.2	12.3	26.0
56	LAKE	55,047	13.7	24.8 *	21.0 *	8.4	33.6
57	ALPINE	1,174	0.3	28.4 *	22.0 *	0.0	96.7
58	SIERRA	3,406	1.0	29.4 *	24.0 *	0.0	71.2

TABLE 7: DEATHS DUE TO ALL CANCERS, 1996-1998

California Counties Ranked by Three-Year Average Age-Adjusted Death Rate

The crude death rate from all cancers for California was 155.7 per 100,000 population, a risk of dying equivalent to approximately one death for every 642 persons. This rate was based on a three-year average number of deaths of 51,302.7 from 1996 to 1998, and a population of 32,956,695 as of July 1, 1997. Among counties with "reliable" rates, the crude rate ranged from 340.3 in Lake County to 116.9 in Kings County, a difference in rates by a factor of 2.9 to 1.

The age-adjusted death rate from all cancers for California for the three-year period from 1996 to 1998 was 110.3 per 100,000 population. Reliable age-adjusted death rates ranged from 156.6 in Trinity County to 87.6 in Lassen County. The difference between crude and age-adjusted rates shows how the county age composition differs from the 1940 United States population.

Altogether 47 counties (45 with reliable age-adjusted death rates) and California as a whole met the Year 2000 National Objective of 130.0 deaths due to all cancers per 100,000 population.

Notes:

Death rates are per 100,000 population. The crude death rate is the actual risk of dying. The age-adjusted rate is the hypothetical rate that the State/County would have if its population were distributed by age in the same proportions as the 1940 United States population.

*   Death rate unreliable, relative standard error is greater than or equal to 23%.

Counties were rank ordered first by increasing age-adjusted death rate (calculated to 15 decimal places), second by decreasing size of the population. For purposes of this report, rates with a relative standard error of greater than or equal to 23% are considered "unreliable". The upper and lower limits of the age-adjusted death rate at the 95% confidence level indicate the precision of the estimated death rate. The wider the interval, the less precise the death rate. The upper and lower limits define the range within which the death rate probably would occur in 95 out 100 independent sets of data similar to the present set. (See Technical Notes in the Appendix, pages 61 through 68).

DATA SOURCES

Department of Health Services: Death Statistical Master Files, 1996-1998.
Department of Finance: 1997 Race/Ethnic Population by County with Age and Sex Detail, June 1999.

TABLE 7
DEATHS DUE TO ALL CANCERS
RANKED BY THREE-YEAR AVERAGE AGE-ADJUSTED DEATH RATE
CALIFORNIA COUNTIES, 1996-1998

RANK ORDER	COUNTY	1997 POPULATION	1996-1998 DEATHS (AVERAGE)	CRUDE DEATH RATE	AGE-ADJUSTED DEATH RATE	95% CONFIDENCE LIMITS	
						LOWER	UPPER
1	MONO	10,531	9.3	88.6 *	70.3 *	24.4	116.2
2	LASSEN	33,861	42.3	125.0	87.6	58.9	116.3
3	SIERRA	3,406	6.7	195.7 *	88.7 *	10.2	167.1
4	SANTA CLARA	1,671,414	2,140.7	128.1	96.5	92.2	100.7
5	SAN BENITO	46,121	64.3	139.5	96.5	70.7	122.2
6	SANTA CRUZ	247,216	364.3	147.4	97.0	86.0	108.1
7	SANTA BARBARA	400,751	632.0	157.7	98.1	89.6	106.7
8	INYO	18,272	42.0	229.9	100.2	65.1	135.3
9	NEVADA	88,356	209.0	236.5	101.0	84.6	117.3
10	VENTURA	727,154	1,046.7	143.9	101.1	94.6	107.6
11	MADERA	113,525	174.0	153.3	102.1	85.4	118.7
12	SAN FRANCISCO	777,368	1,502.7	193.3	102.9	97.0	108.8
13	TULARE	358,337	481.7	134.4	103.2	93.2	113.3
14	MODOC	10,140	25.0	246.5	105.2	58.3	152.0
15	SAN MATEO	711,699	1,264.7	177.7	105.4	99.1	111.7
16	FRESNO	778,674	1,065.0	136.8	105.4	98.6	112.3
17	MONTEREY	377,744	549.7	145.5	105.9	96.3	115.5
18	AMADOR	33,472	84.0	251.0	105.9	79.3	132.5
19	ORANGE	2,705,313	3,860.3	142.7	106.9	103.4	110.5
20	SAN LUIS OBISPO	234,813	451.3	192.2	107.8	96.2	119.4
21	LOS ANGELES	9,524,613	13,304.7	139.7	107.9	106.0	109.9
22	SUTTER	76,004	129.3	170.2	109.1	88.9	129.3
	CALIFORNIA	**32,956,695**	**51,302.7**	**155.7**	**110.3**	**109.2**	**111.3**
23	KINGS	117,793	137.7	116.9	110.6	91.2	130.0
24	IMPERIAL	142,759	195.7	137.1	110.7	93.9	127.4
25	CONTRA COSTA	896,206	1,589.3	177.3	111.3	105.4	117.1
26	ALAMEDA	1,398,421	2,224.0	159.0	111.4	106.5	116.4
27	MARIN	243,214	483.7	198.9	111.6	100.7	122.5
28	RIVERSIDE	1,423,699	2,547.0	178.9	112.3	107.4	117.2
29	SAN DIEGO	2,763,401	4,407.0	159.5	114.6	110.8	118.3
30	EL DORADO	147,409	273.0	185.2	114.6	100.0	129.2
31	KERN	634,404	941.7	148.4	115.1	107.2	123.0
32	PLACER	215,634	412.7	191.4	115.5	103.5	127.5
33	SAN JOAQUIN	542,196	899.3	165.9	117.5	109.1	125.8
34	SONOMA	432,771	890.3	205.7	118.3	109.5	127.1
35	TEHAMA	54,702	134.7	246.2	118.6	95.4	141.8
36	SAN BERNARDINO	1,617,262	2,252.0	139.2	119.9	114.6	125.1
37	STANISLAUS	425,407	697.0	163.8	119.9	110.3	129.6
38	SACRAMENTO	1,146,825	1,982.7	172.9	121.7	116.0	127.5
39	NAPA	121,239	308.3	254.3	122.3	106.4	138.2
40	PLUMAS	20,402	57.0	279.4	122.6	86.3	158.8
41	BUTTE	198,459	500.3	252.1	123.2	110.2	136.1
42	MERCED	201,905	296.3	146.8	123.6	108.6	138.7
43	DEL NORTE	28,413	56.3	198.3	125.3	88.9	161.7
44	MENDOCINO	85,966	188.0	218.7	125.7	106.0	145.5
45	MARIPOSA	15,957	44.0	275.7	126.8	84.4	169.3
46	YOLO	154,850	251.3	162.3	128.2	111.1	145.3
47	SOLANO	378,664	593.7	156.8	129.2	118.4	140.0
	YEAR 2000 NATIONAL OBJECTIVE:				**130.0**		
48	SHASTA	163,351	393.3	240.8	131.6	117.1	146.0
49	HUMBOLDT	126,137	269.0	213.3	133.7	116.2	151.2
50	CALAVERAS	37,916	106.7	281.3	134.2	104.7	163.7
51	YUBA	61,246	107.7	175.8	136.8	109.1	164.5
52	COLUSA	18,530	38.0	205.1	139.9	90.8	189.0
53	GLENN	26,856	59.7	222.2	142.6	102.2	183.0
54	SISKIYOU	44,186	126.0	285.2	144.3	115.5	173.1
55	TUOLUMNE	52,280	160.3	306.7	147.2	120.8	173.7
56	LAKE	55,047	187.3	340.3	149.3	123.1	175.5
57	TRINITY	13,230	39.3	297.3	156.6	100.2	212.9
58	ALPINE	1,174	2.7	227.1 *	169.1 *	0.0	386.1

TABLE 8: DEATHS DUE TO LUNG CANCER, 1996-1998

California Counties Ranked By Three-Year Average Age-Adjusted Death Rate

The crude death rate from lung cancer for California was 41.3 per 100,000 population, a risk of dying equivalent to approximately one death for every 2,421 persons. This rate was based on a three-year average number of deaths of 13,610.3 from 1996 to 1998, and a population of 32,956,695 as of July 1, 1997. Among counties with "reliable" rates, the crude rate ranged from 121.1 in Lake County to 31.6 in Santa Clara County, a difference in rates by a factor of 3.8 to 1.

The age-adjusted death rate from lung cancer for California for the three-year period from 1996 to 1998 was 30.0 per 100,000 population. Reliable age-adjusted death rates ranged from 53.7 in Lake County to 22.8 in Santa Cruz County. The difference between crude and age-adjusted rates shows how the county age composition differs from the 1940 United States population.

Altogether 50 counties (42 with reliable age-adjusted death rates) and California as a whole met the Year 2000 National Objective of 42.0 deaths due to lung cancer per 100,000 population.

Notes:

Death rates are per 100,000 population. The crude death rate is the actual risk of dying. The age-adjusted rate is the hypothetical rate that the State/County would have if its population were distributed by age in the same proportions as the 1940 United States population.

*   Death rate unreliable, relative standard error is greater than or equal to 23%.

Counties were rank ordered first by increasing age-adjusted death rate (calculated to 15 decimal places), second by decreasing size of the population. For purposes of this report, rates with a relative standard error of greater than or equal to 23% are considered "unreliable". The upper and lower limits of the age-adjusted death rate at the 95% confidence level indicate the precision of the estimated death rate. The wider the interval, the less precise the death rate. The upper and lower limits define the range within which the death rate probably would occur in 95 out 100 independent sets of data similar to the present set. (See Technical Notes in the Appendix, pages 61 through 68).

DATA SOURCES

Department of Health Services: Death Statistical Master Files, 1996-1998.
Department of Finance: 1997 Race/Ethnic Population by County with Age and Sex Detail, June 1999.

TABLE 8
DEATHS DUE TO LUNG CANCER
RANKED BY THREE-YEAR AVERAGE AGE-ADJUSTED DEATH RATE
CALIFORNIA COUNTIES, 1996-1998

RANK ORDER	COUNTY	1997 POPULATION	1996-1998 DEATHS (AVERAGE)	CRUDE DEATH RATE	AGE-ADJUSTED DEATH RATE	95% CONFIDENCE LIMITS	
						LOWER	UPPER
1	LASSEN	33,861	10.0	29.5 *	21.8 *	7.3	36.4
2	SANTA CRUZ	247,216	80.3	32.5	22.8	17.3	28.2
3	SAN BENITO	46,121	15.3	33.2 *	24.4 *	11.3	37.4
4	SANTA CLARA	1,671,414	528.3	31.6	24.4	22.3	26.6
5	SIERRA	3,406	2.3	68.5 *	24.5 *	0.0	64.6
6	SAN FRANCISCO	777,368	363.0	46.7	25.1	22.2	27.9
7	SAN MATEO	711,699	317.3	44.6	26.5	23.4	29.6
8	SANTA BARBARA	400,751	168.3	42.0	26.7	22.3	31.1
9	LOS ANGELES	9,524,613	3,255.0	34.2	27.0	26.1	28.0
10	MADERA	113,525	44.7	39.3	27.1	18.6	35.7
11	VENTURA	727,154	276.3	38.0	27.1	23.8	30.5
12	MODOC	10,140	6.7	65.7 *	27.3 *	4.3	50.2
13	MONTEREY	377,744	141.0	37.3	27.9	23.0	32.8
14	NEVADA	88,356	58.0	65.6	28.2	19.7	36.6
15	TULARE	358,337	132.0	36.8	28.3	23.1	33.5
16	SAN LUIS OBISPO	234,813	118.3	50.4	28.8	22.9	34.7
17	ORANGE	2,705,313	1,023.0	37.8	29.0	27.2	30.9
18	MONO	10,531	4.3	41.1 *	29.1 *	1.6	56.6
19	IMPERIAL	142,759	51.0	35.7	29.3	20.6	37.9
20	MARIN	243,214	123.3	50.7	29.4	23.8	34.9
21	FRESNO	778,674	292.0	37.5	29.9	26.2	33.6
	CALIFORNIA	**32,956,695**	**13,610.3**	**41.3**	**30.0**	**29.4**	**30.5**
22	ALAMEDA	1,398,421	585.7	41.9	30.4	27.7	33.0
23	SAN DIEGO	2,763,401	1,155.0	41.8	30.6	28.6	32.5
24	CONTRA COSTA	896,206	422.0	47.1	30.7	27.6	33.7
25	RIVERSIDE	1,423,699	721.0	50.6	32.6	29.9	35.2
26	KINGS	117,793	40.7	34.5	32.7	22.2	43.1
27	SUTTER	76,004	38.7	50.9	33.7	22.5	44.9
28	PLACER	215,634	117.0	54.3	33.7	27.3	40.2
29	SONOMA	432,771	240.7	55.6	33.9	29.2	38.6
30	KERN	634,404	274.7	43.3	34.4	30.0	38.7
31	SAN BERNARDINO	1,617,262	631.3	39.0	34.6	31.8	37.5
32	SAN JOAQUIN	542,196	260.0	48.0	34.9	30.3	39.4
33	COLUSA	18,530	10.0	54.0 *	35.1 *	11.5	58.7
34	INYO	18,272	14.7	80.3 *	35.2 *	14.9	55.4
35	MERCED	201,905	85.0	42.1	36.0	27.9	44.2
36	SACRAMENTO	1,146,825	580.0	50.6	36.2	33.1	39.3
37	EL DORADO	147,409	88.7	60.2	36.4	28.3	44.4
38	NAPA	121,239	87.3	72.0	36.4	27.8	45.1
39	STANISLAUS	425,407	202.7	47.6	36.6	31.2	42.0
40	MARIPOSA	15,957	12.7	79.4 *	37.1 *	14.8	59.3
41	HUMBOLDT	126,137	73.0	57.9	37.4	28.1	46.6
42	BUTTE	198,459	155.3	78.3	38.6	31.4	45.7
43	YOLO	154,850	75.3	48.6	38.8	29.5	48.2
44	CALAVERAS	37,916	30.3	80.0	38.9	23.5	54.2
45	TEHAMA	54,702	45.3	82.9	39.5	26.5	52.6
46	SHASTA	163,351	116.0	71.0	39.8	31.9	47.7
47	SOLANO	378,664	182.7	48.2	41.4	35.2	47.6
48	AMADOR	33,472	32.3	96.6	41.5	25.3	57.8
49	TUOLUMNE	52,280	44.0	84.2	41.8	27.7	55.8
50	SISKIYOU	44,186	38.7	87.5	41.9	27.2	56.6
	YEAR 2000 NATIONAL OBJECTIVE:				**42.0**		
51	MENDOCINO	85,966	61.3	71.3	43.0	31.4	54.6
52	GLENN	26,856	17.7	65.8 *	44.7 *	22.2	67.2
53	ALPINE	1,174	0.7	56.8 *	47.0 *	0.0	167.2
54	TRINITY	13,230	12.0	90.7 *	48.5 *	18.8	78.2
55	PLUMAS	20,402	20.3	99.7	48.6 *	25.2	72.0
56	DEL NORTE	28,413	20.7	72.7	49.1 *	25.8	72.4
57	YUBA	61,246	39.7	64.8	50.9	34.0	67.9
58	LAKE	55,047	66.7	121.1	53.7	38.4	69.0

TABLE 9: DEATHS DUE TO FEMALE BREAST CANCER, 1996-1998

California Counties Ranked By Three-Year Average Age-Adjusted Death Rate

The crude death rate from female breast cancer for California was 25.3 per 100,000 population, a risk of dying equivalent to approximately one death for every 3,950 females. This rate was based on a three-year average number of deaths of 4,160.0 from 1996 to 1998, and a female population of 16,432,119 as of July 1, 1997. Among counties with "reliable" rates, the crude rate ranged from 46.1 in Nevada County to 17.8 in Tulare County, a difference in rates by a factor of 2.6 to 1.

The age-adjusted death rate from female breast cancer for California for the three-year period from 1996 to 1998 was 18.3 per 100,000 population. Reliable age-adjusted death rates ranged from 22.9 in Humboldt County to 14.3 in Monterey County. The difference between crude and age-adjusted rates shows how the county age composition differs from the 1940 United States population.

Altogether 46 counties (24 with reliable age-adjusted death rates) and California as a whole met the Year 2000 National Objective of 20.6 deaths due to female breast cancer per 100,000 population.

Notes:

Death rates are per 100,000 female population. The crude death rate is the actual risk of dying. The age-adjusted rate is the hypothetical rate that the State/County would have if its population were distributed by age in the same proportions as the 1940 United States population.

*   Death rate unreliable, relative standard error is greater than or equal to 23%.
\+   Standard error indeterminate, death rate based on no (zero) deaths.
\-   Upper and lower limits at the 95% confidence level are not calculated for no (zero) deaths.

Counties were rank ordered first by increasing age-adjusted death rate (calculated to 15 decimal places), second by decreasing size of the population. For purposes of this report, rates with a relative standard error of greater than or equal to 23% are considered "unreliable". The upper and lower limits of the age-adjusted death rate at the 95% confidence level indicate the precision of the estimated death rate. The wider the interval, the less precise the death rate. The upper and lower limits define the range within which the death rate probably would occur in 95 out 100 independent sets of data similar to the present set. (See Technical Notes in the Appendix, pages 61 through 68).

DATA SOURCES

Department of Health Services: Death Statistical Master Files, 1996-1998.
Department of Finance: 1997 Race/Ethnic Population by County with Age and Sex Detail, June 1999.

TABLE 9
DEATHS DUE TO FEMALE BREAST CANCER
RANKED BY THREE-YEAR AVERAGE AGE-ADJUSTED DEATH RATE
CALIFORNIA COUNTIES, 1996-1998

RANK ORDER	COUNTY	1997 FEMALE POPULATION	1996-1998 DEATHS (AVERAGE)	CRUDE DEATH RATE	AGE-ADJUSTED DEATH RATE	95% CONFIDENCE LIMITS LOWER	95% CONFIDENCE LIMITS UPPER
1	SIERRA	1,707	0.0	0.0 +	0.0 +	-	-
2	MONO	4,854	0.3	6.9 *	8.4 *	0.0	36.9
3	LASSEN	13,159	3.7	27.9 *	12.8 *	0.0	29.0
4	MADERA	58,847	10.7	18.1 *	13.4 *	4.7	22.2
5	DEL NORTE	13,071	2.7	20.4 *	13.6 *	0.0	31.0
6	SUTTER	38,323	8.0	20.9 *	13.9 *	3.4	24.5
7	MONTEREY	179,658	37.0	20.6	14.3	9.2	19.4
8	SANTA BARBARA	198,001	49.3	24.9	14.5	9.8	19.1
9	TULARE	179,708	32.0	17.8	14.5	9.1	20.0
10	KINGS	54,304	8.7	16.0 *	14.6 *	4.4	24.9
11	FRESNO	392,232	77.7	19.8	15.0	11.3	18.6
12	CALAVERAS	19,230	5.3	27.7 *	15.2 *	1.1	29.4
13	MARIPOSA	7,933	3.0	37.8 *	15.5 *	0.0	35.8
14	TEHAMA	27,868	7.7	27.5 *	15.5 *	3.0	28.1
15	MENDOCINO	43,094	12.3	28.6 *	16.1 *	5.7	26.4
16	YUBA	30,695	6.0	19.5 *	16.2 *	2.7	29.7
17	IMPERIAL	69,054	13.0	18.8 *	16.3 *	6.9	25.7
18	SAN FRANCISCO	392,405	111.0	28.3	16.3	12.9	19.8
19	NAPA	61,174	18.0	29.4 *	16.5 *	7.7	25.3
20	SANTA CLARA	822,014	185.0	22.5	16.5	14.0	19.0
21	SAN BENITO	22,803	4.7	20.5 *	16.5 *	1.0	32.0
22	MODOC	4,954	2.0	40.4 *	16.8 *	0.0	40.4
23	SAN MATEO	359,679	99.7	27.7	17.0	13.4	20.7
24	SONOMA	219,854	64.7	29.4	17.5	12.6	22.4
25	VENTURA	359,694	88.7	24.7	17.7	13.8	21.6
26	BUTTE	101,634	31.3	30.8	17.7	10.4	25.0
27	ORANGE	1,338,608	326.7	24.4	17.9	15.9	20.0
28	MERCED	100,120	20.3	20.3	17.9 *	9.6	26.3
29	PLACER	108,511	31.3	28.9	18.2	11.2	25.1
30	LOS ANGELES	4,766,007	1,121.0	23.5	18.2	17.1	19.3
31	ALAMEDA	706,766	187.0	26.5	18.2	15.4	21.0
32	SISKIYOU	22,504	7.3	32.6 *	18.2 *	3.4	33.1
33	SOLANO	185,220	42.7	23.0	18.3	12.6	24.1
	CALIFORNIA	**16,432,119**	**4,160.0**	**25.3**	**18.3**	**17.7**	**18.9**
34	INYO	9,326	3.0	32.2 *	19.0 *	0.0	44.0
35	AMADOR	15,461	4.3	28.0 *	19.0 *	0.0	40.5
36	PLUMAS	10,223	3.7	35.9 *	19.2 *	0.0	41.2
37	SAN BERNARDINO	806,610	183.0	22.7	19.3	16.3	22.3
38	CONTRA COSTA	455,045	138.3	30.4	19.4	15.9	22.8
39	STANISLAUS	215,618	53.0	24.6	19.5	13.9	25.1
40	SANTA CRUZ	123,885	35.7	28.8	19.7	12.7	26.8
41	SACRAMENTO	583,835	162.0	27.7	19.8	16.5	23.0
42	SAN JOAQUIN	268,056	71.7	26.7	19.8	14.8	24.8
43	SAN DIEGO	1,354,301	366.3	27.0	19.8	17.5	22.0
44	KERN	311,454	77.3	24.8	19.9	15.1	24.7
45	COLUSA	9,033	2.0	22.1 *	20.4 *	0.0	49.2
46	EL DORADO	73,729	22.3	30.3	20.6	11.5	29.6
	YEAR 2000 NATIONAL OBJECTIVE:				20.6		
47	RIVERSIDE	712,507	214.3	30.1	20.7	17.6	23.8
48	SHASTA	83,270	29.3	35.2	20.7	12.4	29.0
49	SAN LUIS OBISPO	113,885	36.0	31.6	20.9	13.0	28.8
50	MARIN	122,216	41.7	34.1	21.1	14.1	28.1
51	LAKE	28,220	12.3	43.7 *	22.4 *	6.8	38.1
52	YOLO	78,005	20.7	26.5	22.5 *	12.0	33.0
53	HUMBOLDT	63,672	23.0	36.1	22.9	12.6	33.3
54	TUOLUMNE	24,780	11.0	44.4 *	24.5 *	8.2	40.8
55	NEVADA	44,785	20.7	46.1	24.8 *	12.6	37.1
56	TRINITY	6,546	3.0	45.8 *	27.0 *	0.0	68.0
57	GLENN	13,414	6.3	47.2 *	34.4 *	3.8	65.0
58	ALPINE	558	0.3	59.7 *	61.4 *	0.0	269.7

TABLE 10: DEATHS DUE TO CORONARY HEART DISEASE, 1996-1998

California Counties Ranked By Three-Year Average Age-Adjusted Death Rate

The crude death rate from coronary heart disease for California was 175.5 per 100,000 population, a risk of dying equivalent to approximately one death for every 570 persons. This rate was based on a three-year average number of deaths of 57,846.7 from 1996 to 1998, and a population of 32,956,695 as of July 1, 1997. Among counties with "reliable" rates, the crude rate ranged from 370.3 in Inyo County to 103.4 in San Benito County, a difference in rates by a factor of 3.6 to 1.

The age-adjusted death rate from coronary heart disease for California for the three-year period from 1996 to 1998 was 93.9 per 100,000 population. Reliable age-adjusted death rates ranged from 123.4 in San Bernardino County to 54.5 in San Benito County. The difference between crude and age-adjusted rates shows how the county age composition differs from the 1940 United States population.

Altogether 47 counties (43 with reliable age-adjusted death rates) and California as a whole met the Year 2000 National Objective of 100.0 deaths due to coronary heart disease per 100,000 population.

Notes:

Death rates are per 100,000 population. The crude death rate is the actual risk of dying. The age-adjusted rate is the hypothetical rate that the State/County would have if its population were distributed by age in the same proportions as the 1940 United States population.

*   Death rate unreliable, relative standard error is greater than or equal to 23%.

Counties were rank ordered first by increasing age-adjusted death rate (calculated to 15 decimal places), second by decreasing size of the population. For purposes of this report, rates with a relative standard error of greater than or equal to 23% are considered "unreliable". The upper and lower limits of the age-adjusted death rate at the 95% confidence level indicate the precision of the estimated death rate. The wider the interval, the less precise the death rate. The upper and lower limits define the range within which the death rate probably would occur in 95 out 100 independent sets of data similar to the present set. (See Technical Notes in the Appendix, pages 61 through 68).

DATA SOURCES

Department of Health Services: Death Statistical Master Files, 1996-1998.
Department of Finance: 1997 Race/Ethnic Population by County with Age and Sex Detail, June 1999.

RANK ORDER	COUNTY	1997 POPULATION	1996-1998 DEATHS (AVERAGE)	CRUDE DEATH RATE	AGE-ADJUSTED DEATH RATE	95% CONFIDENCE LIMITS LOWER	UPPER
1	SAN BENITO	46,121	47.7	103.4	54.5	37.0	72.1
2	SIERRA	3,406	6.3	185.9 *	57.1 *	2.9	111.3
3	MARIN	243,214	375.7	154.5	61.0	53.9	68.1
4	NEVADA	88,356	188.3	213.2	66.5	54.8	78.2
5	PLUMAS	20,402	39.0	191.2	68.0	43.1	92.9
6	SANTA CRUZ	247,216	375.0	151.7	68.1	59.7	76.5
7	SAN MATEO	711,699	1,155.0	162.3	69.7	65.1	74.3
8	EL DORADO	147,409	211.7	143.6	70.0	59.6	80.4
9	MONTEREY	377,744	479.7	127.0	71.1	63.8	78.4
10	CALAVERAS	37,916	76.0	200.4	72.1	53.2	91.0
11	BUTTE	198,459	411.0	207.1	72.5	63.4	81.6
12	GLENN	26,856	45.0	167.6	72.9	47.7	98.2
13	SANTA BARBARA	400,751	677.0	168.9	74.1	67.4	80.8
14	MARIPOSA	15,957	31.3	196.4	74.2	42.2	106.1
15	LASSEN	33,861	41.7	123.1	75.0	49.7	100.2
16	VENTURA	727,154	1,028.7	141.5	75.2	70.1	80.4
17	TRINITY	13,230	23.7	178.9	75.3 *	40.7	109.8
18	MONO	10,531	12.7	120.3 *	75.8 *	30.8	120.9
19	SANTA CLARA	1,671,414	2,181.7	130.5	76.9	73.4	80.4
20	SONOMA	432,771	825.7	190.8	78.8	72.3	85.3
21	CONTRA COSTA	896,206	1,447.7	161.5	79.0	74.5	83.6
22	TUOLUMNE	52,280	111.3	213.0	79.4	61.6	97.1
23	MODOC	10,140	20.0	197.2	80.2 *	35.2	125.2
24	COLUSA	18,530	30.7	165.5	80.7	46.7	114.6
25	TEHAMA	54,702	117.7	215.1	82.3	64.5	100.1
26	PLACER	215,634	390.0	180.9	82.4	73.2	91.7
27	YOLO	154,850	208.0	134.3	82.5	69.7	95.2
28	MADERA	113,525	177.7	156.5	82.7	68.7	96.7
29	SISKIYOU	44,186	94.3	213.5	82.7	62.9	102.5
30	SAN LUIS OBISPO	234,813	499.0	212.5	83.5	74.4	92.5
31	SAN FRANCISCO	777,368	1,689.0	217.3	83.8	78.9	88.6
32	NAPA	121,239	308.7	254.6	85.6	73.6	97.6
33	DEL NORTE	28,413	50.0	176.0	85.9	57.9	113.9
34	AMADOR	33,472	92.7	276.8	86.6	65.4	107.8
35	HUMBOLDT	126,137	229.0	181.5	87.5	74.3	100.6
36	ALAMEDA	1,398,421	2,312.3	165.4	88.4	84.3	92.5
37	SAN DIEGO	2,763,401	4,621.3	167.2	88.8	85.8	91.8
38	SHASTA	163,351	341.0	208.8	89.1	78.3	99.9
39	IMPERIAL	142,759	185.7	130.1	90.3	75.8	104.8
40	SOLANO	378,664	483.7	127.7	90.4	81.9	99.0
41	MENDOCINO	85,966	174.3	202.8	91.1	75.5	106.7
42	FRESNO	778,674	1,253.3	161.0	91.2	85.4	97.1
43	MERCED	201,905	282.3	139.8	91.9	79.9	103.8
44	ORANGE	2,705,313	4,441.7	164.2	91.9	89.0	94.9
	CALIFORNIA	**32,956,695**	**57,846.7**	**175.5**	**93.9**	**93.0**	**94.8**
45	SUTTER	76,004	152.3	200.4	95.0	77.7	112.3
46	SAN JOAQUIN	542,196	1,011.7	186.6	98.7	91.6	105.8
47	SACRAMENTO	1,146,825	2,094.7	182.6	99.9	95.2	104.7
	YEAR 2000 NATIONAL OBJECTIVE:				**100.0**		
48	INYO	18,272	67.7	370.3	101.0	71.2	130.9
49	TULARE	358,337	639.3	178.4	102.4	93.2	111.6
50	LOS ANGELES	9,524,613	17,254.7	181.2	106.7	104.9	108.5
51	RIVERSIDE	1,423,699	3,316.7	233.0	107.4	103.0	111.8
52	YUBA	61,246	106.0	173.1	111.2	87.4	134.9
53	ALPINE	1,174	2.3	198.8 *	111.5 *	0.0	271.6
54	KINGS	117,793	165.3	140.4	111.8	93.1	130.6
55	LAKE	55,047	178.7	324.6	113.4	92.0	134.8
56	STANISLAUS	425,407	875.3	205.8	114.9	106.1	123.6
57	KERN	634,404	1,250.3	197.1	116.7	109.4	124.1
58	SAN BERNARDINO	1,617,262	2,937.7	181.6	123.4	118.4	128.3

TABLE 11: DEATHS DUE TO CEREBROVASCULAR DISEASE
1996-1998

California Counties Ranked by Three-Year Average Age-Adjusted Death Rate

The crude death rate from cerebrovascular disease for California was 50.1 per 100,000 population, a risk of dying equivalent to approximately one death for every 1,997 persons. This rate was based on a three-year average number of deaths of 16,505.0 from 1996 to 1998, and a population of 32,956,695 as of July 1, 1997. Among counties with "reliable" rates, the crude rate ranged from 121.7 in Lake County to 38.0 in San Bernardino County, a difference in rates by a factor of 3.2 to 1.

The age-adjusted death rate from cerebrovascular disease for California for the three-year period from 1996 to 1998 was 25.3 per 100,000 population. Reliable age-adjusted death rates ranged from 33.3 in Yuba County to 19.6 in Nevada County. The difference between crude and age-adjusted rates shows how the county age composition differs from the 1940 United States population.

Altogether eight counties (one with a reliable age-adjusted death rate), but not California, met the Year 2000 National Objective of 20.0 deaths due to cerebrovascular disease per 100,000 population.

Notes:

Death rates are per 100,000 population. The crude death rate is the actual risk of dying. The age-adjusted rate is the hypothetical rate that the State/County would have if its population were distributed by age in the same proportions as the 1940 United States population.

*	Death rate unreliable, relative standard error is greater than or equal to 23%.
+	Standard error indeterminate, death rate based on no (zero) deaths.
-	Upper and lower limits at the 95% confidence level are not calculated for no (zero) deaths.

Counties were rank ordered first by increasing age-adjusted death rate (calculated to 15 decimal places), second by decreasing size of the population. For purposes of this report, rates with a relative standard error of greater than or equal to 23% are considered "unreliable". The upper and lower limits of the age-adjusted death rate at the 95% confidence level indicate the precision of the estimated death rate. The wider the interval, the less precise the death rate. The upper and lower limits define the range within which the death rate probably would occur in 95 out 100 independent sets of data similar to the present set. (See Technical Notes in the Appendix, pages 61 through 68).

DATA SOURCES

Department of Health Services: Death Statistical Master Files, 1996-1998.
Department of Finance: 1997 Race/Ethnic Population by County with Age and Sex Detail, June 1999.

TABLE 11
DEATHS DUE TO CEREBROVASCULAR DISEASE
RANKED BY THREE-YEAR AVERAGE AGE-ADJUSTED DEATH RATE
CALIFORNIA COUNTIES, 1996-1998

RANK ORDER	COUNTY	1997 POPULATION	1996-1998 DEATHS (AVERAGE)	CRUDE DEATH RATE	AGE-ADJUSTED DEATH RATE	95% CONFIDENCE LIMITS	
						LOWER	UPPER
1	ALPINE	1,174	0.0	0.0 +	0.0 +	-	-
2	LASSEN	33,861	8.7	25.6 *	14.2 *	3.4	24.9
3	SIERRA	3,406	2.0	58.7 *	14.7 *	0.0	38.1
4	PLUMAS	20,402	9.7	47.4 *	17.6 *	0.2	34.9
5	MODOC	10,140	6.7	65.7 *	17.7 *	1.3	34.1
6	MONO	10,531	2.3	22.2 *	18.0 *	0.0	41.7
7	NEVADA	88,356	68.7	77.7	19.6	13.8	25.4
8	AMADOR	33,472	25.0	74.7	19.8 *	10.2	29.5
	YEAR 2000 NATIONAL OBJECTIVE:				20.0		
9	MARIPOSA	15,957	10.7	66.8 *	20.2 *	5.6	34.8
10	MADERA	113,525	47.7	42.0	20.8	14.1	27.5
11	SAN BENITO	46,121	20.0	43.4	21.6 *	10.6	32.6
12	SANTA CRUZ	247,216	129.0	52.2	21.7	17.2	26.2
13	EL DORADO	147,409	77.3	52.5	21.8	16.4	27.1
14	SAN LUIS OBISPO	234,813	157.7	67.1	22.0	17.7	26.2
15	SHASTA	163,351	95.3	58.4	22.4	17.2	27.7
16	VENTURA	727,154	339.3	46.7	22.9	20.2	25.7
17	SANTA BARBARA	400,751	237.0	59.1	23.6	19.9	27.2
18	SANTA CLARA	1,671,414	689.0	41.2	23.6	21.7	25.5
19	RIVERSIDE	1,423,699	766.7	53.9	23.9	21.9	26.0
20	KERN	634,404	267.0	42.1	24.2	20.9	27.5
21	GLENN	26,856	14.3	53.4 *	24.2 *	9.0	39.5
22	ORANGE	2,705,313	1,204.7	44.5	24.3	22.8	25.8
23	SAN DIEGO	2,763,401	1,385.0	50.1	24.3	22.8	25.8
24	LOS ANGELES	9,524,613	4,053.3	42.6	24.5	23.6	25.3
25	PLACER	215,634	125.3	58.1	24.6	19.8	29.5
26	TRINITY	13,230	8.3	63.0 *	24.7 *	5.7	43.8
27	SAN FRANCISCO	777,368	531.3	68.4	24.9	22.3	27.5
28	MARIN	243,214	168.0	69.1	24.9	20.6	29.3
29	SAN BERNARDINO	1,617,262	614.0	38.0	25.0	22.8	27.2
	CALIFORNIA	**32,956,695**	**16,505.0**	**50.1**	**25.3**	**24.9**	**25.8**
30	MENDOCINO	85,966	59.7	69.4	25.5	18.1	32.8
31	TUOLUMNE	52,280	35.0	66.9	25.5	15.0	36.0
32	SAN MATEO	711,699	465.0	65.3	25.7	23.0	28.4
33	MONTEREY	377,744	182.3	48.3	25.8	21.5	30.1
34	CALAVERAS	37,916	31.3	82.6	26.1	14.4	37.7
35	YOLO	154,850	77.0	49.7	26.7	19.8	33.5
36	NAPA	121,239	110.0	90.7	26.9	20.6	33.3
37	SUTTER	76,004	53.7	70.6	27.4	19.0	35.9
38	SISKIYOU	44,186	37.3	84.5	27.5	16.8	38.2
39	BUTTE	198,459	182.3	91.9	27.6	22.3	32.9
40	FRESNO	778,674	416.0	53.4	27.6	24.5	30.8
41	COLUSA	18,530	11.0	59.4 *	27.8 *	8.4	47.2
42	HUMBOLDT	126,137	80.0	63.4	27.9	20.7	35.0
43	CONTRA COSTA	896,206	555.3	62.0	28.4	25.8	31.0
44	IMPERIAL	142,759	66.3	46.5	28.5	20.7	36.4
45	ALAMEDA	1,398,421	778.0	55.6	28.5	26.2	30.8
46	STANISLAUS	425,407	233.0	54.8	28.6	24.4	32.8
47	DEL NORTE	28,413	17.0	59.8 *	28.7 *	13.2	44.1
48	TEHAMA	54,702	48.0	87.7	29.1	18.8	39.4
49	SONOMA	432,771	340.7	78.7	29.1	25.4	32.9
50	MERCED	201,905	101.0	50.0	29.4	23.0	35.8
51	INYO	18,272	19.7	107.6	29.4 *	13.3	45.6
52	SACRAMENTO	1,146,825	639.7	55.8	29.5	27.0	32.0
53	TULARE	358,337	208.3	58.1	30.9	26.0	35.9
54	SAN JOAQUIN	542,196	349.3	64.4	31.9	28.0	35.9
55	KINGS	117,793	57.3	48.7	32.6	23.3	42.0
56	LAKE	55,047	67.0	121.7	32.8	22.1	43.4
57	SOLANO	378,664	184.3	48.7	33.0	27.9	38.1
58	YUBA	61,246	35.3	57.7	33.3	20.8	45.7

TABLE 12: DRUG-RELATED DEATHS, 1996-1998

California Counties Ranked By Three-Year Average Age-Adjusted Death Rate

The crude death rate from drug-related deaths for California was 8.0 per 100,000 population, a risk of dying equivalent to approximately one death for every 12,451 persons. This rate was based on a three-year average number of deaths of 2,647.0 from 1996 to 1998, and a population of 32,956,695 as of July 1, 1997. Among counties with "reliable" rates, the crude rate ranged from 21.4 in San Francisco County to 5.1 in Santa Clara County, a difference in rates by a factor of 4.2 to 1.

The age-adjusted death rate from drug-related deaths for California for the three-year period from 1996 to 1998 was 7.5 per 100,000 population. Reliable age-adjusted death rates ranged from 18.1 in San Francisco County to 4.5 in Santa Clara County. The difference between crude and age-adjusted rates shows how the county age composition differs from the 1940 United States population.

Altogether seven counties (none with reliable age-adjusted death rates), but not California, met the Year 2000 National Objective of 3.0 drug-related deaths per 100,000 population.

Notes:

Death rates are per 100,000 population. The crude death rate is the actual risk of dying. The age-adjusted rate is the hypothetical rate that the State/County would have if its population were distributed by age in the same proportions as the 1940 United States population.

*   Death rate unreliable, relative standard error is greater than or equal to 23%.
\+   Standard error indeterminate, death rate based on no (zero) deaths.
\-   Upper and lower limits at the 95% confidence level are not calculated for no (zero) deaths.

Counties were rank ordered first by increasing age-adjusted death rate (calculated to 15 decimal places), second by decreasing size of the population. For purposes of this report, rates with a relative standard error of greater than or equal to 23% are considered "unreliable". The upper and lower limits of the age-adjusted death rate at the 95% confidence level indicate the precision of the estimated death rate. The wider the interval, the less precise the death rate. The upper and lower limits define the range within which the death rate probably would occur in 95 out 100 independent sets of data similar to the present set. (See Technical Notes in the Appendix, pages 61 through 68).

DATA SOURCES

Department of Health Services: Death Statistical Master Files, 1996-1998.
Department of Finance: 1997 Race/Ethnic Population by County with Age and Sex Detail, June 1999.

TABLE 12
DRUG-RELATED DEATHS
RANKED BY THREE-YEAR AVERAGE AGE-ADJUSTED DEATH RATE
CALIFORNIA COUNTIES, 1996-1998

RANK ORDER	COUNTY	1997 POPULATION	1996-1998 DEATHS (AVERAGE)	CRUDE DEATH RATE	AGE-ADJUSTED DEATH RATE	95% CONFIDENCE LIMITS LOWER	UPPER
1	SIERRA	3,406	0.0	0.0 +	0.0 +	-	-
2	ALPINE	1,174	0.0	0.0 +	0.0 +	-	-
3	SISKIYOU	44,186	0.7	1.5 *	1.3 *	0.0	4.5
4	PLUMAS	20,402	0.3	1.6 *	1.5 *	0.0	6.7
5	COLUSA	18,530	0.3	1.8 *	1.7 *	0.0	7.6
6	TRINITY	13,230	0.7	5.0 *	2.4 *	0.0	9.0
7	SUTTER	76,004	2.0	2.6 *	2.8 *	0.0	6.6
	YEAR 2000 NATIONAL OBJECTIVE:				3.0		
8	NEVADA	88,356	3.0	3.4 *	3.2 *	0.0	7.2
9	GLENN	26,856	1.0	3.7 *	3.3 *	0.0	10.4
10	SAN BENITO	46,121	1.7	3.6 *	3.7 *	0.0	9.3
11	AMADOR	33,472	1.3	4.0 *	4.0 *	0.0	11.0
12	CALAVERAS	37,916	1.7	4.4 *	4.0 *	0.0	10.2
13	PLACER	215,634	10.7	4.9 *	4.2 *	1.6	6.9
14	SANTA CLARA	1,671,414	85.3	5.1	4.5	3.5	5.5
15	SOLANO	378,664	19.7	5.2	4.6	2.5	6.7
16	YOLO	154,850	7.7	5.0 *	4.8 *	1.3	8.2
17	SAN MATEO	711,699	40.7	5.7	4.9	3.3	6.4
18	INYO	18,272	1.0	5.5 *	4.9 *	0.0	14.6
19	NAPA	121,239	6.7	5.5 *	5.1 *	1.2	9.0
20	CONTRA COSTA	896,206	53.0	5.9	5.2	3.7	6.6
21	MADERA	113,525	5.7	5.0 *	5.2 *	0.9	9.6
22	MERCED	201,905	11.0	5.4 *	5.6 *	2.2	8.9
23	MODOC	10,140	0.3	3.3 *	5.6 *	0.0	24.6
24	TEHAMA	54,702	3.7	6.7 *	5.7 *	0.0	11.8
25	ORANGE	2,705,313	176.3	6.5	5.9	5.0	6.8
26	FRESNO	778,674	46.3	6.0	6.1	4.4	7.9
27	BUTTE	198,459	13.7	6.9 *	6.5 *	2.9	10.1
28	MONO	10,531	1.0	9.5 *	6.7 *	0.0	21.0
29	KINGS	117,793	8.3	7.1 *	6.7 *	2.1	11.3
30	SANTA CRUZ	247,216	19.7	8.0	6.9 *	3.8	10.0
31	RIVERSIDE	1,423,699	101.3	7.1	7.1	5.7	8.4
32	MARIN	243,214	21.3	8.8	7.1	3.9	10.2
33	SAN BERNARDINO	1,617,262	118.0	7.3	7.1	5.8	8.4
34	LOS ANGELES	9,524,613	740.0	7.8	7.3	6.8	7.8
35	VENTURA	727,154	57.3	7.9	7.4	5.4	9.3
36	YUBA	61,246	4.3	7.1 *	7.4 *	0.4	14.4
37	SACRAMENTO	1,146,825	93.7	8.2	7.5	5.9	9.0
	CALIFORNIA	**32,956,695**	**2,647.0**	**8.0**	**7.5**	**7.2**	**7.8**
38	LASSEN	33,861	3.0	8.9 *	8.1 *	0.0	17.4
39	MONTEREY	377,744	31.7	8.4	8.3	5.3	11.2
40	SONOMA	432,771	40.0	9.2	8.3	5.6	11.0
41	ALAMEDA	1,398,421	132.7	9.5	8.4	6.9	9.8
42	MARIPOSA	15,957	1.3	8.4 *	8.4 *	0.0	23.3
43	TUOLUMNE	52,280	5.3	10.2 *	8.5 *	1.1	15.9
44	EL DORADO	147,409	14.0	9.5 *	8.8 *	4.0	13.5
45	SHASTA	163,351	14.7	9.0 *	8.8 *	4.2	13.5
46	TULARE	358,337	30.0	8.4	9.0	5.8	12.2
47	SAN DIEGO	2,763,401	254.3	9.2	9.1	8.0	10.2
48	SANTA BARBARA	400,751	42.0	10.5	9.5	6.5	12.4
49	SAN LUIS OBISPO	234,813	22.7	9.7	9.6	5.6	13.7
50	IMPERIAL	142,759	12.3	8.6 *	9.8 *	4.3	15.3
51	STANISLAUS	425,407	41.7	9.8	9.8	6.8	12.8
52	MENDOCINO	85,966	8.3	9.7 *	10.6 *	3.2	18.0
53	SAN JOAQUIN	542,196	61.7	11.4	11.3	8.5	14.1
54	KERN	634,404	74.0	11.7	11.5	8.8	14.1
55	LAKE	55,047	7.7	13.9 *	13.0 *	3.7	22.3
56	DEL NORTE	28,413	4.0	14.1 *	13.2 *	0.0	26.4
57	HUMBOLDT	126,137	20.0	15.9	14.6	8.1	21.1
58	SAN FRANCISCO	777,368	166.3	21.4	18.1	15.2	21.0

TABLE 13: REPORTED INCIDENCE OF AIDS, 1996-1998

California Counties Ranked By Three-Year Average Crude Case Rate

The crude case rate of reported AIDS cases for California was 17.31 cases per 100,000 population or approximately one reported AIDS case for every 5,777 persons. This rate was based on a 1996 to 1998 three-year average reported number of cases of 5,705.00, and a population of 32,956,695 as of July 1, 1997. Among counties with "reliable" rates, the crude case rate ranged from 103.51 in San Francisco to 7.24 in Ventura County, a difference in rates by a factor of 14.3 to 1.

The Year 2000 National Objective midcourse revision for incidence of AIDS is 43.00 cases per 100,000 population.

Altogether 57 counties (23 with reliable case rates) and California as a whole met the Year 2000 National Objective of 43.00 cases per 100,000 population.

Notes:

Case rates are per 100,000 population. The average number of cases excludes those with "unknown" county of residence.

*   Case rate unreliable, relative standard error is greater than or equal to 23%.
+   Standard error indeterminate, case rate based on no (zero) cases.
-        Upper and lower limits at the 95% confidence level are not calculated for no (zero) cases.

Counties were rank ordered first by increasing case rate (calculated to 15 decimal places), second by decreasing size of the population. For purposes of this report, rates with a relative standard error greater than or equal to 23% are considered "unreliable". The upper and lower limits of the crude case rate at the 95% confidence level give an indication of the precision of the estimated case rate. The wider the interval, the less precise the rate. The upper and lower limits of the crude case rate at the 95% confidence level define the range within which the case rate would probably occur in 95 out of 100 independent sets of data similar to the present set. (See additional Technical Notes in the Appendix, pages 61 through 68).

DATA SOURCES

Department of Health Services: Office of AIDS, AIDS Reporting System.
Department of Finance: 1997 Race/Ethnic Population by County with Age and Sex Detail, June 1999.

TABLE 13
REPORTED INCIDENCE OF AIDS
RANKED BY THREE-YEAR AVERAGE CRUDE CASE RATE
CALIFORNIA COUNTIES, 1996-1998

RANK ORDER	COUNTY	1997 POPULATION	1996-1998 CASES (AVERAGE)	CRUDE CASE RATE	95% CONFIDENCE LIMITS	
					LOWER	UPPER
1	MONO	10,531	0.00	0.00 +	-	-
2	MODOC	10,140	0.00	0.00 +	-	-
3	SIERRA	3,406	0.00	0.00 +	-	-
4	ALPINE	1,174	0.00	0.00 +	-	-
5	COLUSA	18,530	0.33	1.80 *	0.00	7.91
6	PLACER	215,634	5.00	2.32 *	0.29	4.35
7	TEHAMA	54,702	1.33	2.44 *	0.00	6.57
8	GLENN	26,856	0.67	2.48 *	0.00	8.44
9	TRINITY	13,230	0.33	2.52 *	0.00	11.07
10	SAN BENITO	46,121	1.33	2.89 *	0.00	7.80
11	PLUMAS	20,402	0.67	3.27 *	0.00	11.11
12	EL DORADO	147,409	5.00	3.39 *	0.42	6.37
13	DEL NORTE	28,413	1.00	3.52 *	0.00	10.42
14	INYO	18,272	0.67	3.65 *	0.00	12.41
15	SHASTA	163,351	6.00	3.67 *	0.73	6.61
16	IMPERIAL	142,759	5.67	3.97 *	0.70	7.24
17	MARIPOSA	15,957	0.67	4.18 *	0.00	14.21
18	TULARE	358,337	15.67	4.37 *	2.21	6.54
19	MERCED	201,905	9.67	4.79 *	1.77	7.81
20	MADERA	113,525	5.67	4.99 *	0.88	9.10
21	TUOLUMNE	52,280	2.67	5.10 *	0.00	11.22
22	YOLO	154,850	8.00	5.17 *	1.59	8.75
23	BUTTE	198,459	10.33	5.21 *	2.03	8.38
24	SUTTER	76,004	4.00	5.26 *	0.11	10.42
25	MENDOCINO	85,966	4.67	5.43 *	0.50	10.35
26	YUBA	61,246	3.33	5.44 *	0.00	11.29
27	HUMBOLDT	126,137	7.00	5.55 *	1.44	9.66
28	NAPA	121,239	7.33	6.05 *	1.67	10.43
29	CALAVERAS	37,916	2.33	6.15 *	0.00	14.05
30	SISKIYOU	44,186	3.00	6.79 *	0.00	14.47
31	VENTURA	727,154	52.67	7.24	5.29	9.20
32	SANTA BARBARA	400,751	30.00	7.49	4.81	10.16
33	SANTA CRUZ	247,216	19.33	7.82	4.33	11.31
34	NEVADA	88,356	7.00	7.92 *	2.05	13.79
35	AMADOR	33,472	2.67	7.97 *	0.00	17.53
36	STANISLAUS	425,407	34.67	8.15	5.44	10.86
37	SAN JOAQUIN	542,196	48.67	8.98	6.45	11.50
38	SAN MATEO	711,699	68.00	9.55	7.28	11.83
39	SAN BERNARDINO	1,617,262	155.33	9.60	8.09	11.12
40	FRESNO	778,674	75.00	9.63	7.45	11.81
41	SANTA CLARA	1,671,414	164.67	9.85	8.35	11.36
42	ORANGE	2,705,313	284.00	10.50	9.28	11.72
43	CONTRA COSTA	896,206	97.00	10.82	8.67	12.98
44	MONTEREY	377,744	44.33	11.74	8.28	15.19
45	KERN	634,404	79.00	12.45	9.71	15.20
46	SAN LUIS OBISPO	234,813	31.00	13.20	8.55	17.85
47	SACRAMENTO	1,146,825	154.00	13.43	11.31	15.55
48	SONOMA	432,771	59.67	13.79	10.29	17.29
49	KINGS	117,793	20.00	16.98	9.54	24.42
	CALIFORNIA	**32,956,695**	**5,705.00**	**17.31**	**16.86**	**17.76**
50	SOLANO	378,664	66.00	17.43	13.22	21.63
51	RIVERSIDE	1,423,699	248.33	17.44	15.27	19.61
52	LAKE	55,047	10.00	18.17 *	6.91	29.43
53	LASSEN	33,861	6.33	18.70 *	4.14	33.27
54	SAN DIEGO	2,763,401	584.67	21.16	19.44	22.87
55	LOS ANGELES	9,524,613	2,064.33	21.67	20.74	22.61
56	ALAMEDA	1,398,421	319.00	22.81	20.31	25.31
57	MARIN	243,214	60.33	24.81	18.55	31.07
	YEAR 2000 NATIONAL OBJECTIVE:			**43.00**		
58	SAN FRANCISCO	777,368	804.67	103.51	96.36	110.66

TABLE 14: REPORTED INCIDENCE OF MEASLES, 1996-1998

California Counties Ranked By Three-Year Average Crude Case Rate

The crude case rate of reported measles cases for California was 0.08 cases per 100,000 population or approximately one reported measles case for every 1,251,679 persons. This rate was based on a 1996 to 1998 three-year average reported number of cases of 26.33, and a population of 32,956,695 as of July 1, 1997. Of the 58 counties, none had a "reliable" rate.

Altogether 37 counties met the Year 2000 National Objectives of no reported cases of measles during the three-year period. Many of the remaining counties were so close to zero, that for all practical purposes, the Year 2000 National Objective has been met by these counties as well.

The Year 2000 National Objective for incidence of reported measles cases is zero cases, which is equivalent to a case rate of 0.00 per 100,000 population.

Notes:

Case rates are per 100,000 population.

*   Case rate unreliable, relative standard error is greater than or equal to 23%.
+   Standard error indeterminate, case rate based on no (zero) cases.
-          Upper and lower limits at the 95% confidence level are not calculated for no (zero) cases.

Counties were rank ordered first by increasing case rate (calculated to 15 decimal places), second by decreasing size of the population. For purposes of this report, rates with a relative standard error greater than or equal to 23% are considered "unreliable". The upper and lower limits of the crude case rate at the 95% confidence level give an indication of the precision of the estimated case rate. The wider the interval, the less precise the rate. The upper and lower limits of the crude case rate at the 95% confidence level define the range within which the case rate would probably occur in 95 out of 100 independent sets of data similar to the present set. (See additional Technical Notes in the Appendix, pages 61 through 68).

DATA SOURCES

Department of Health Services: Division of Communicable Disease Control.
Department of Finance: 1997 Race/Ethnic Population by County with Age and Sex Detail, June 1999.

TABLE 14
REPORTED INCIDENCE OF MEASLES
RANKED BY THREE-YEAR AVERAGE CRUDE CASE RATE
CALIFORNIA COUNTIES, 1996-1998

RANK ORDER	COUNTY	1997 POPULATION	1996-1998 CASES (AVERAGE)	CRUDE CASE RATE	95% CONFIDENCE LIMITS LOWER	UPPER
1	SANTA CLARA	1,671,414	0.00	0.00 +	-	-
2	RIVERSIDE	1,423,699	0.00	0.00 +	-	-
3	FRESNO	778,674	0.00	0.00 +	-	-
4	SONOMA	432,771	0.00	0.00 +	-	-
5	STANISLAUS	425,407	0.00	0.00 +	-	-
6	SANTA BARBARA	400,751	0.00	0.00 +	-	-
7	SOLANO	378,664	0.00	0.00 +	-	-
8	MARIN	243,214	0.00	0.00 +	-	-
9	SAN LUIS OBISPO	234,813	0.00	0.00 +	-	-
10	MERCED	201,905	0.00	0.00 +	-	-
11	BUTTE	198,459	0.00	0.00 +	-	-
12	SHASTA	163,351	0.00	0.00 +	-	-
13	YOLO	154,850	0.00	0.00 +	-	-
14	EL DORADO	147,409	0.00	0.00 +	-	-
15	IMPERIAL	142,759	0.00	0.00 +	-	-
16	NAPA	121,239	0.00	0.00 +	-	-
17	KINGS	117,793	0.00	0.00 +	-	-
18	MADERA	113,525	0.00	0.00 +	-	-
19	MENDOCINO	85,966	0.00	0.00 +	-	-
20	SUTTER	76,004	0.00	0.00 +	-	-
21	YUBA	61,246	0.00	0.00 +	-	-
22	LAKE	55,047	0.00	0.00 +	-	-
23	TEHAMA	54,702	0.00	0.00 +	-	-
24	SAN BENITO	46,121	0.00	0.00 +	-	-
25	SISKIYOU	44,186	0.00	0.00 +	-	-
26	CALAVERAS	37,916	0.00	0.00 +	-	-
27	LASSEN	33,861	0.00	0.00 +	-	-
28	AMADOR	33,472	0.00	0.00 +	-	-
29	DEL NORTE	28,413	0.00	0.00 +	-	-
30	GLENN	26,856	0.00	0.00 +	-	-
31	PLUMAS	20,402	0.00	0.00 +	-	-
32	COLUSA	18,530	0.00	0.00 +	-	-
33	MARIPOSA	15,957	0.00	0.00 +	-	-
34	TRINITY	13,230	0.00	0.00 +	-	-
35	MODOC	10,140	0.00	0.00 +	-	-
36	SIERRA	3,406	0.00	0.00 +	-	-
37	ALPINE	1,174	0.00	0.00 +	-	-
		YEAR 2000 NATIONAL OBJECTIVE:		**0.00**		
38	SACRAMENTO	1,146,825	0.33	0.03 *	0.00	0.13
39	LOS ANGELES	9,524,613	3.67	0.04 *	0.00	0.08
40	SAN DIEGO	2,763,401	2.00	0.07 *	0.00	0.17
41	SAN BERNARDINO	1,617,262	1.33	0.08 *	0.00	0.22
	CALIFORNIA	**32,956,695**	**26.33**	**0.08**	**0.05**	**0.11**
42	MONTEREY	377,744	0.33	0.09 *	0.00	0.39
43	VENTURA	727,154	0.67	0.09 *	0.00	0.31
44	SAN MATEO	711,699	0.67	0.09 *	0.00	0.32
45	ORANGE	2,705,313	2.67	0.10 *	0.00	0.22
46	PLACER	215,634	0.33	0.15 *	0.00	0.68
47	SAN FRANCISCO	777,368	1.33	0.17 *	0.00	0.46
48	SAN JOAQUIN	542,196	1.00	0.18 *	0.00	0.55
49	TULARE	358,337	0.67	0.19 *	0.00	0.63
50	ALAMEDA	1,398,421	2.67	0.19 *	0.00	0.42
51	CONTRA COSTA	896,206	2.00	0.22 *	0.00	0.53
52	SANTA CRUZ	247,216	0.67	0.27 *	0.00	0.92
53	NEVADA	88,356	0.33	0.38 *	0.00	1.66
54	KERN	634,404	2.67	0.42 *	0.00	0.92
55	TUOLUMNE	52,280	0.33	0.64 *	0.00	2.80
56	HUMBOLDT	126,137	1.00	0.79 *	0.00	2.35
57	INYO	18,272	1.00	5.47 *	0.00	16.20
58	MONO	10,531	0.67	6.33 *	0.00	21.53

TABLE 15: REPORTED INCIDENCE OF TUBERCULOSIS, 1996-1998

California Counties Ranked By Three-Year Average Crude Case Rate

The crude case rate of reported tuberculosis cases for California was 12.37 cases per 100,000 population or approximately one reported tuberculosis case for every 8,086 persons. This rate was based on a 1996 to 1998 three-year average reported number of cases of 4,075.67, and a population of 32,956,695 as of July 1, 1997.

Among counties with "reliable" rates, the crude case rate ranged from 30.49 in San Francisco to 5.62 in Riverside County, a difference in rates by a factor of 5.4 to 1.

Altogether 18 counties, (none with reliable case rates), but not California, met the Year 2000 National Objective of 3.50 cases per 100,000 population.

Notes:

Case rates are per 100,000 population.

*   Case rate unreliable, relative standard error is greater than or equal to 23%.
+   Standard error indeterminate, case rate based on no (zero) cases.
-        Upper and lower limits at the 95% confidence level are not calculated for no (zero) cases.

Counties were rank ordered first by increasing case rate (calculated to 15 decimal places), second by decreasing size of the population. Of two counties with the same case rate, the one with the larger population is ranked ahead of the smaller. For purposes of this report, rates with a relative standard error greater than or equal to 23% are considered "unreliable". The upper and lower limits of the crude case rate at the 95% confidence level give an indication of the precision of the estimated case rate. The wider the interval, the less precise the rate. The upper and lower limits of the crude case rate at the 95% confidence level define the range within which the case rate would probably occur in 95 out of 100 independent sets of data similar to the present set. (See additional Technical Notes in the Appendix, pages 61 through 68).

DATA SOURCES

Department of Health Services: Division of Communicable Disease Control.
Department of Finance: 1997 Race/Ethnic Population by County with Age and Sex Detail, June 1999.

TABLE 15
REPORTED INCIDENCE OF TUBERCULOSIS
RANKED BY THREE-YEAR AVERAGE CRUDE CASE RATE
CALIFORNIA COUNTIES, 1996-1998

RANK ORDER	COUNTY	1997 POPULATION	1996-1998 CASES (AVERAGE)	CRUDE CASE RATE	95% CONFIDENCE LIMITS LOWER	95% CONFIDENCE LIMITS UPPER
1	INYO	18,272	0.00	0.00 +	-	-
2	MARIPOSA	15,957	0.00	0.00 +	-	-
3	MONO	10,531	0.00	0.00 +	-	-
4	MODOC	10,140	0.00	0.00 +	-	-
5	SIERRA	3,406	0.00	0.00 +	-	-
6	ALPINE	1,174	0.00	0.00 +	-	-
7	NEVADA	88,356	0.33	0.38 *	0.00	1.66
8	CALAVERAS	37,916	0.33	0.88 *	0.00	3.86
9	DEL NORTE	28,413	0.33	1.17 *	0.00	5.16
10	SISKIYOU	44,186	0.67	1.51 *	0.00	5.13
11	PLACER	215,634	4.00	1.85 *	0.04	3.67
12	LASSEN	33,861	0.67	1.97 *	0.00	6.70
13	EL DORADO	147,409	3.00	2.04 *	0.00	4.34
14	MENDOCINO	85,966	2.00	2.33 *	0.00	5.55
15	TRINITY	13,230	0.33	2.52 *	0.00	11.07
16	AMADOR	33,472	1.00	2.99 *	0.00	8.84
17	PLUMAS	20,402	0.67	3.27 *	0.00	11.11
18	SHASTA	163,351	5.67	3.47 *	0.61	6.33
	YEAR 2000 NATIONAL OBJECTIVE:			**3.50**		
19	BUTTE	198,459	7.00	3.53 *	0.91	6.14
20	GLENN	26,856	1.00	3.72 *	0.00	11.02
21	SONOMA	432,771	17.33	4.01 *	2.12	5.89
22	SAN BENITO	46,121	2.33	5.06 *	0.00	11.55
23	SAN LUIS OBISPO	234,813	12.00	5.11 *	2.22	8.00
24	NAPA	121,239	6.33	5.22 *	1.16	9.29
25	COLUSA	18,530	1.00	5.40 *	0.00	15.97
26	RIVERSIDE	1,423,699	80.00	5.62	4.39	6.85
27	TUOLUMNE	52,280	3.00	5.74 *	0.00	12.23
28	SANTA CRUZ	247,216	15.00	6.07 *	3.00	9.14
29	MERCED	201,905	12.33	6.11 *	2.70	9.52
30	MARIN	243,214	16.00	6.58 *	3.36	9.80
31	LAKE	55,047	3.67	6.66 *	0.00	13.48
32	STANISLAUS	425,407	30.33	7.13	4.59	9.67
33	SAN BERNARDINO	1,617,262	120.33	7.44	6.11	8.77
34	TEHAMA	54,702	4.33	7.92 *	0.46	15.38
35	MADERA	113,525	9.00	7.93 *	2.75	13.11
36	HUMBOLDT	126,137	10.00	7.93 *	3.01	12.84
37	YOLO	154,850	12.33	7.96 *	3.52	12.41
38	TULARE	358,337	29.00	8.09	5.15	11.04
39	VENTURA	727,154	68.67	9.44	7.21	11.68
40	KERN	634,404	60.67	9.56	7.16	11.97
41	SUTTER	76,004	8.00	10.53 *	3.23	17.82
42	YUBA	61,246	6.67	10.89 *	2.62	19.15
43	ORANGE	2,705,313	300.33	11.10	9.85	12.36
44	MONTEREY	377,744	43.00	11.38	7.98	14.79
45	SANTA BARBARA	400,751	45.67	11.40	8.09	14.70
46	SACRAMENTO	1,146,825	134.67	11.74	9.76	13.73
47	FRESNO	778,674	91.67	11.77	9.36	14.18
48	SAN MATEO	711,699	85.67	12.04	9.49	14.59
49	CONTRA COSTA	896,206	109.33	12.20	9.91	14.49
	CALIFORNIA	**32,956,695**	**4,075.67**	**12.37**	**11.99**	**12.75**
50	SAN JOAQUIN	542,196	67.33	12.42	9.45	15.38
51	SAN DIEGO	2,763,401	352.67	12.76	11.43	14.09
52	SOLANO	378,664	51.33	13.56	9.85	17.26
53	LOS ANGELES	9,524,613	1,442.67	15.15	14.37	15.93
54	SANTA CLARA	1,671,414	268.67	16.07	14.15	18.00
55	ALAMEDA	1,398,421	230.00	16.45	14.32	18.57
56	KINGS	117,793	21.00	17.83	10.20	25.45
57	IMPERIAL	142,759	39.33	27.55	18.94	36.16
58	SAN FRANCISCO	777,368	237.00	30.49	26.61	34.37

TABLE 16: REPORTED INCIDENCE OF PRIMARY AND SECONDARY SYPHILIS, 1996-1998

California Counties Ranked By Three-Year Average Crude Case Rate

The crude case rate of reported primary and secondary syphilis cases for California was 1.24 cases per 100,000 population or approximately one reported syphilis case for every 80,382 persons. This rate was based on a 1996 to 1998 three-year average reported number of cases of 410.00, and a population of 32,956,695 as of July 1, 1997.

Among counties with "reliable" rates, the crude case rate ranged from 6.76 in Fresno County to 1.00 in San Diego County, a difference in rates by a factor of 6.8 to 1.

Altogether 55 counties (two with reliable case rates) and California as a whole met the revised Year 2000 National Objective of 4.00 cases per 100,000 population.

Notes:

Case rates are per 100,000 population.

*   Case rate unreliable, relative standard error is greater than or equal to 23%.
\+   Standard error indeterminate, case rate based on no (zero) cases.
\-   Upper and lower limits at the 95% confidence level are not calculated for no (zero) cases.

Counties were rank ordered first by increasing case rate (calculated to 15 decimal places), second by decreasing size of the population. Of two counties with the same case rate, the one with the larger population is ranked ahead of the smaller. For purposes of this report, rates with a relative standard error greater than or equal to 23% are considered "unreliable". The upper and lower limits of the crude case rate at the 95% confidence level give an indication of the precision of the estimated case rate. The wider the interval, the less precise the rate. The upper and lower limits of the crude case rate at the 95% confidence level define the range within which the case rate would probably occur in 95 out of 100 independent sets of data similar to the present set. (See additional Technical Notes in the Appendix, pages 61 through 68).

DATA SOURCES

Department of Health Services: Division of Communicable Disease Control.
Department of Finance: 1997 Race/Ethnic Population by County with Age and Sex Detail, June 1999.

TABLE 16
REPORTED INCIDENCE OF PRIMARY AND SECONDARY SYPHILIS
RANKED BY THREE-YEAR AVERAGE CRUDE CASE RATE
CALIFORNIA COUNTIES, 1996-1998

RANK ORDER	COUNTY	1997 POPULATION	1996-1998 CASES (AVERAGE)	CRUDE CASE RATE	95% CONFIDENCE LIMITS LOWER	UPPER
1	CONTRA COSTA	896,206	0.00	0.00 +	-	-
2	SONOMA	432,771	0.00	0.00 +	-	-
3	PLACER	215,634	0.00	0.00 +	-	-
4	BUTTE	198,459	0.00	0.00 +	-	-
5	SHASTA	163,351	0.00	0.00 +	-	-
6	YOLO	154,850	0.00	0.00 +	-	-
7	EL DORADO	147,409	0.00	0.00 +	-	-
8	IMPERIAL	142,759	0.00	0.00 +	-	-
9	HUMBOLDT	126,137	0.00	0.00 +	-	-
10	NAPA	121,239	0.00	0.00 +	-	-
11	NEVADA	88,356	0.00	0.00 +	-	-
12	MENDOCINO	85,966	0.00	0.00 +	-	-
13	SUTTER	76,004	0.00	0.00 +	-	-
14	YUBA	61,246	0.00	0.00 +	-	-
15	LAKE	55,047	0.00	0.00 +	-	-
16	TEHAMA	54,702	0.00	0.00 +	-	-
17	TUOLUMNE	52,280	0.00	0.00 +	-	-
18	SAN BENITO	46,121	0.00	0.00 +	-	-
19	SISKIYOU	44,186	0.00	0.00 +	-	-
20	CALAVERAS	37,916	0.00	0.00 +	-	-
21	LASSEN	33,861	0.00	0.00 +	-	-
22	AMADOR	33,472	0.00	0.00 +	-	-
23	DEL NORTE	28,413	0.00	0.00 +	-	-
24	PLUMAS	20,402	0.00	0.00 +	-	-
25	COLUSA	18,530	0.00	0.00 +	-	-
26	INYO	18,272	0.00	0.00 +	-	-
27	MARIPOSA	15,957	0.00	0.00 +	-	-
28	TRINITY	13,230	0.00	0.00 +	-	-
29	MONO	10,531	0.00	0.00 +	-	-
30	MODOC	10,140	0.00	0.00 +	-	-
31	SIERRA	3,406	0.00	0.00 +	-	-
32	ALPINE	1,174	0.00	0.00 +	-	-
33	SANTA BARBARA	400,751	0.33	0.08 *	0.00	0.37
34	MARIN	243,214	0.33	0.14 *	0.00	0.60
35	SOLANO	378,664	0.67	0.18 *	0.00	0.60
36	VENTURA	727,154	1.33	0.18 *	0.00	0.49
37	SANTA CLARA	1,671,414	3.67	0.22 *	0.00	0.44
38	SANTA CRUZ	247,216	0.67	0.27 *	0.00	0.92
39	SAN LUIS OBISPO	234,813	0.67	0.28 *	0.00	0.97
40	SACRAMENTO	1,146,825	3.67	0.32 *	0.00	0.65
41	SAN MATEO	711,699	2.67	0.37 *	0.00	0.82
42	SAN BERNARDINO	1,617,262	7.33	0.45 *	0.13	0.78
43	RIVERSIDE	1,423,699	6.67	0.47 *	0.11	0.82
44	KINGS	117,793	0.67	0.57 *	0.00	1.92
45	ORANGE	2,705,313	16.67	0.62 *	0.32	0.91
46	MONTEREY	377,744	2.33	0.62 *	0.00	1.41
47	TULARE	358,337	2.33	0.65 *	0.00	1.49
48	ALAMEDA	1,398,421	9.67	0.69 *	0.26	1.13
49	MERCED	201,905	2.00	0.99 *	0.00	2.36
50	SAN DIEGO	2,763,401	27.67	1.00	0.63	1.37
51	GLENN	26,856	0.33	1.24 *	0.00	5.45
	CALIFORNIA	**32,956,695**	**410.00**	**1.24**	**1.12**	**1.36**
52	STANISLAUS	425,407	5.67	1.33 *	0.24	2.43
53	LOS ANGELES	9,524,613	173.67	1.82	1.55	2.09
54	KERN	634,404	17.00	2.68 *	1.41	3.95
55	MADERA	113,525	4.00	3.52 *	0.07	6.98
	YEAR 2000 NATIONAL OBJECTIVE:			**4.00**		
56	SAN FRANCISCO	777,368	38.33	4.93	3.37	6.49
57	SAN JOAQUIN	542,196	29.00	5.35	3.40	7.30
58	FRESNO	778,674	52.67	6.76	4.94	8.59

TABLE 17A: INFANT MORTALITY, ALL RACE/ETHNIC GROUPS, 1994-1996

California Counties Ranked By Three-Year Average Birth Cohort Infant Death Rate

The birth cohort infant death rate for California was 6.4 deaths per 1,000 live births, a risk of dying equivalent to approximately one infant death for every 156 births. This rate was based on the 3,550.0 infant deaths among 552,440.3 live births, the three-year average from 1994 to 1996.

Among counties with "reliable" rates, the birth cohort infant death rate ranged from 10.3 in Kern County to 4.5 in San Mateo County, a difference in rates by a factor of 2.3 to 1.

Altogether 39 counties (17 with reliable birth cohort infant death rates) and California as a whole met the Year 2000 National Objective of 7.0 infant deaths per 1,000 birth cohort live births.

Notes:

Infant deaths are deaths that occurred during the first year of life. Birth cohort infant death rates are per 1,000 live births. The birth cohort infant death rate is based upon births during a calendar year (a cohort) tracked individually for 365 days to determine whether or not death occurred. Thus, the deaths in the numerator of a birth cohort infant death rate are the records of the same infants as the births in the denominator. Birth cohort infant death rates, like population crude death rates, show the true risk of dying, but in addition, like age-adjusted population death rates, allow direct comparisons between counties.

*   Death rate unreliable, relative standard error is greater than or equal to 23%.
\+   Standard error indeterminate, death rate based on no (zero) deaths.
\-   Upper and lower limits at the 95% confidence level are not calculated for no (zero) deaths.

Counties were rank ordered first by increasing birth cohort death rate (calculated to 15 decimal places), second by decreasing size of the total number of live births. Infant mortality data by race/ethnicity is based on the mother's race/ethnicity reported on the birth record, and are grouped according to the latest methodology used by the State Data Center, Department of Finance to compile population estimates. For purposes of this report, rates with a relative standard error greater than or equal to 23% are considered "unreliable". The upper and lower limits of the birth cohort death rate at the 95% confidence level indicate the precision of the estimated death rate. The wider the interval, the less precise the death rate. The upper and lower limits define the range within which the death rate would probably occur in 95 out of 100 independent sets of data similar to the present set. (See additional Technical Notes in the Appendix, pages 61 through 68).

DATA SOURCES

Department of Health Services: Birth Cohort-Perinatal Outcome Files, 1994-1996.

RANK ORDER	COUNTY	THREE-YEAR AVERAGE LIVE BIRTHS	THREE-YEAR AVERAGE INFANT DEATHS	BIRTH COHORT INFANT DEATH RATE	95% CONFIDENCE LIMITS LOWER	95% CONFIDENCE LIMITS UPPER
1	MONO	127.7	0.0	0.0 +	-	-
2	SIERRA	19.3	0.0	0.0 +	-	-
3	ALPINE	9.0	0.0	0.0 +	-	-
4	MARIPOSA	162.7	0.3	2.0 *	0.0	9.0
5	GLENN	448.0	1.7	3.7 *	0.0	9.4
6	MARIN	2,669.0	10.0	3.7 *	1.4	6.1
7	SAN MATEO	10,126.3	46.0	4.5	3.2	5.9
8	SONOMA	5,484.7	25.3	4.6	2.8	6.4
9	NAPA	1,492.7	7.3	4.9 *	1.4	8.5
10	SANTA BARBARA	6,063.3	30.7	5.1	3.3	6.8
11	IMPERIAL	2,619.3	13.7	5.2 *	2.5	8.0
12	SAN LUIS OBISPO	2,609.7	13.7	5.2 *	2.5	8.0
13	ORANGE	48,919.7	261.0	5.3	4.7	6.0
14	SANTA CLARA	26,424.7	141.0	5.3	4.5	6.2
15	SAN FRANCISCO	8,671.3	46.3	5.3	3.8	6.9
16	VENTURA	11,867.7	63.7	5.4	4.0	6.7
17	SISKIYOU	495.0	2.7	5.4 *	0.0	11.9
18	SAN BENITO	778.3	4.3	5.6 *	0.3	10.8
19	SANTA CRUZ	3,524.7	19.7	5.6	3.1	8.0
20	EL DORADO	1,727.7	9.7	5.6 *	2.1	9.1
21	PLACER	2,773.7	15.7	5.6 *	2.9	8.4
22	YUBA	1,169.3	6.7	5.7 *	1.4	10.0
23	MONTEREY	6,837.7	39.0	5.7	3.9	7.5
24	SAN DIEGO	46,140.1	268.3	5.8	5.1	6.5
25	CONTRA COSTA	12,401.3	72.3	5.8	4.5	7.2
26	ALAMEDA	21,000.7	125.0	6.0	4.9	7.0
27	TEHAMA	723.7	4.3	6.0 *	0.3	11.6
28	PLUMAS	166.0	1.0	6.0 *	0.0	17.8
	CALIFORNIA	**552,440.3**	**3,550.0**	**6.4**	**6.2**	**6.6**
29	NEVADA	823.0	5.3	6.5 *	1.0	12.0
30	TULARE	7,233.7	47.3	6.5	4.7	8.4
31	MADERA	1,981.3	13.0	6.6 *	3.0	10.1
32	LOS ANGELES	174,839.7	1,148.3	6.6	6.2	6.9
33	SOLANO	5,813.0	38.3	6.6	4.5	8.7
34	LASSEN	300.7	2.0	6.7 *	0.0	15.9
35	SUTTER	1,179.7	8.0	6.8 *	2.1	11.5
36	SAN JOAQUIN	9,062.0	61.7	6.8	5.1	8.5
37	STANISLAUS	7,286.7	50.7	7.0	5.0	8.9
38	MENDOCINO	1,099.7	7.7	7.0 *	2.0	11.9
39	TUOLUMNE	473.7	3.3	7.0 *	0.0	14.6
	YEAR 2000 NATIONAL OBJECTIVE:			**7.0**		
40	RIVERSIDE	24,196.3	174.7	7.2	6.1	8.3
41	SHASTA	2,068.7	15.0	7.3 *	3.6	10.9
42	MERCED	3,967.0	29.0	7.3	4.6	10.0
43	LAKE	637.0	4.7	7.3 *	0.7	14.0
44	COLUSA	317.7	2.3	7.3 *	0.0	16.8
45	SACRAMENTO	18,364.3	135.0	7.4	6.1	8.6
46	AMADOR	270.7	2.0	7.4 *	0.0	17.6
47	YOLO	2,206.0	17.0	7.7 *	4.0	11.4
48	TRINITY	129.7	1.0	7.7 *	0.0	22.8
49	SAN BERNARDINO	30,318.0	234.3	7.7	6.7	8.7
50	HUMBOLDT	1,557.3	12.7	8.1 *	3.7	12.6
51	BUTTE	2,492.3	20.7	8.3	4.7	11.9
52	FRESNO	15,086.3	129.7	8.6	7.1	10.1
53	INYO	225.7	2.0	8.9 *	0.0	21.1
54	KINGS	2,210.0	21.0	9.5	5.4	13.6
55	KERN	12,037.7	123.7	10.3	8.5	12.1
56	DEL NORTE	328.7	3.7	11.2 *	0.0	22.6
57	CALAVERAS	361.0	5.0	13.9 *	1.7	26.0
58	MODOC	119.3	1.7	14.0 *	0.0	35.2

TABLE 17B: ASIAN/OTHER INFANT MORTALITY, 1994-1996

California Counties Ranked By Three-Year Average Birth Cohort Infant Death Rate

The Asian/Other birth cohort infant death rate for California was 5.3 deaths per 1,000 live births, a risk of dying equivalent to approximately one infant death for every 189 births. This rate was based on the 317.7 infant deaths among 60,026.0 live births, the three-year average from 1994 to 1996.

Among counties with "reliable" rates, the birth cohort infant death rate ranged from 5.7 in San Diego County to 4.7 in Santa Clara County, a difference in rates by a factor of 1.2 to 1.

A Year 2000 National Objective for an Asian/Other birth cohort infant death rate has not been established.

Notes:

Infant deaths are deaths that occurred during the first year of life. Birth cohort infant death rates are per 1,000 live births. The birth cohort infant death rate is based upon births during a calendar year (a cohort) tracked individually for 365 days to determine whether or not death occurred. Thus, the deaths in the numerator of a birth cohort infant death rate are the records of the same infants as the births in denominator. Birth cohort infant death rates, like population crude death rates, show the true risk of dying, but in addition, like age-adjusted population death rates, allow direct comparison between counties.

*   Death rate unreliable, relative standard error is greater than or equal to 23%.
\+   Standard error indeterminate, case rate based on no (zero) deaths.
-        Upper and lower limits at the 95% confidence level are not calculated for no (zero) deaths.

Counties were rank ordered first by increasing birth cohort death rate (calculated to 15 decimal places), second by decreasing size of the total number of live births. Infant mortality data by race/ethnicity is based on the mother's race/ethnicity reported on the birth record, and are grouped according to the latest methodology used by the State Data Center, Department of Finance to compile population estimates. For purposes of this report, rates with a relative standard error greater than or equal to 23% are considered "unreliable". The upper and lower limits of the birth cohort death rate at the 95% confidence level indicate the precision of the estimated death rate. The wider the interval, the less precise the death rate. The upper and lower limits define the range within which the death rate would probably occur in 95 out of 100 independent sets of data similar to the present set. (See additional Technical Notes in the Appendix, pages 61 through 68).

DATA SOURCES

Department of Health Services: Birth Cohort-Perinatal Outcome Files, 1994-1996.

TABLE 17B
ASIAN/OTHER INFANT MORTALITY
RANKED BY THREE-YEAR AVERAGE BIRTH COHORT INFANT DEATH RATE
CALIFORNIA COUNTIES, 1994-1996

RANK ORDER	COUNTY	THREE-YEAR AVERAGE LIVE BIRTHS	THREE-YEAR AVERAGE INFANT DEATHS	BIRTH COHORT INFANT DEATH RATE	95% CONFIDENCE LIMITS LOWER	95% CONFIDENCE LIMITS UPPER
		YEAR 2000 NATIONAL OBJECTIVE: NONE ESTABLISHED				
1	SUTTER	177.7	0.0	0.0 +	-	-
2	MARIN	170.7	0.0	0.0 +	-	-
3	PLACER	118.3	0.0	0.0 +	-	-
4	GLENN	41.0	0.0	0.0 +	-	-
5	TEHAMA	25.7	0.0	0.0 +	-	-
6	SISKIYOU	25.3	0.0	0.0 +	-	-
7	IMPERIAL	25.3	0.0	0.0 +	-	-
8	NEVADA	18.0	0.0	0.0 +	-	-
9	SAN BENITO	15.3	0.0	0.0 +	-	-
10	TUOLUMNE	14.3	0.0	0.0 +	-	-
11	AMADOR	9.7	0.0	0.0 +	-	-
12	COLUSA	8.7	0.0	0.0 +	-	-
13	PLUMAS	8.0	0.0	0.0 +	-	-
14	TRINITY	7.7	0.0	0.0 +	-	-
15	MODOC	6.7	0.0	0.0 +	-	-
16	MARIPOSA	6.3	0.0	0.0 +	-	-
17	ALPINE	6.0	0.0	0.0 +	-	-
18	MONO	6.0	0.0	0.0 +	-	-
19	SIERRA	0.7	0.0	0.0 +	-	-
20	MONTEREY	394.0	1.0	2.5 *	0.0	7.5
21	SANTA CRUZ	115.3	0.3	2.9 *	0.0	12.7
22	SANTA BARBARA	286.3	1.0	3.5 *	0.0	10.3
23	SONOMA	281.7	1.0	3.6 *	0.0	10.5
24	VENTURA	655.3	2.3	3.6 *	0.0	8.1
25	MENDOCINO	91.0	0.3	3.7 *	0.0	16.1
26	SAN FRANCISCO	3,075.7	11.7	3.8 *	1.6	6.0
27	SAN LUIS OBISPO	80.7	0.3	4.1 *	0.0	18.2
28	EL DORADO	75.0	0.3	4.4 *	0.0	19.5
29	YUBA	217.7	1.0	4.6 *	0.0	13.6
30	SANTA CLARA	6,559.0	30.7	4.7	3.0	6.3
31	SAN JOAQUIN	1,406.0	6.7	4.7 *	1.1	8.3
32	SAN MATEO	2,227.0	10.7	4.8 *	1.9	7.7
33	LOS ANGELES	16,390.3	82.3	5.0	3.9	6.1
34	CONTRA COSTA	1,487.0	7.7	5.2 *	1.5	8.8
35	BUTTE	253.3	1.3	5.3 *	0.0	14.2
36	ALAMEDA	4,376.3	23.3	5.3	3.2	7.5
	CALIFORNIA	**60,026.0**	**317.7**	**5.3**	**4.7**	**5.9**
37	ORANGE	5,758.0	32.0	5.6	3.6	7.5
38	SOLANO	884.3	5.0	5.7 *	0.7	10.6
39	SAN DIEGO	4,612.3	26.3	5.7	3.5	7.9
40	SACRAMENTO	2,672.3	15.3	5.7 *	2.9	8.6
41	KERN	454.7	2.7	5.9 *	0.0	12.9
42	SAN BERNARDINO	1,623.7	10.0	6.2 *	2.3	10.0
43	NAPA	51.7	0.3	6.5 *	0.0	28.4
44	YOLO	199.7	1.3	6.7 *	0.0	18.0
45	MADERA	48.7	0.3	6.8 *	0.0	30.1
46	RIVERSIDE	1,141.7	8.0	7.0 *	2.2	11.9
47	STANISLAUS	502.7	3.7	7.3 *	0.0	14.8
48	FRESNO	1,973.7	16.0	8.1 *	4.1	12.1
49	TULARE	328.3	2.7	8.1 *	0.0	17.9
50	MERCED	512.0	4.3	8.5 *	0.5	16.4
51	KINGS	109.3	1.0	9.1 *	0.0	27.1
52	INYO	33.7	0.3	9.9 *	0.0	43.5
53	HUMBOLDT	191.3	2.0	10.5 *	0.0	24.9
54	SHASTA	149.3	1.7	11.2 *	0.0	28.1
55	DEL NORTE	48.3	0.7	13.8 *	0.0	46.9
56	LASSEN	17.3	0.3	19.2 *	0.0	84.5
57	CALAVERAS	16.3	0.3	20.4 *	0.0	89.7
58	LAKE	33.7	1.3	39.6 *	0.0	106.8

TABLE 17C: BLACK INFANT MORTALITY, 1994-1996

California Counties Ranked By Three-Year Average Birth Cohort Infant Death Rate

The Black birth cohort infant death rate for California was 13.7 deaths per 1,000 live births, a risk of dying equivalent to approximately one infant death for every 73 births. This rate was based on the 538.0 deaths among the 39,259.3 live births, the three-year average from 1994 to 1996.

Among counties with "reliable" rates, the birth cohort infant death rate for Blacks ranged from 15.0 in San Bernardino County to 10.9 in Alameda County, a difference in rates by a factor of 1.4 to 1.

Altogether 36 counties (one with a reliable birth cohort infant death rate), but not California, met the Year 2000 National Objective of 11.0 infant deaths per 1,000 birth cohort live births.

Notes:

Infant deaths are deaths that occurred during the first year of life. Birth cohort infant death rates are per 1,000 live births. The birth cohort infant death rate is based upon births during a calendar year (a cohort) tracked individually for 365 days to determine whether or not death occurred. Thus, the deaths in the numerator of a birth cohort infant death rate are the records of the same infants as the births in the denominator. Birth cohort infant death rates, like population crude death rates, show the true risk of dying, but in addition, like age-adjusted population death rates, allow direct comparisons between counties.

*   Death rate unreliable, relative standard error is greater than or equal to 23%.
\+   Standard error indeterminate, death rate based on no (zero) deaths.
-     Upper and lower limits at the 95% confidence level are not calculated for no (zero) deaths.

Counties were rank ordered first by increasing birth cohort death rate (calculated to 15 decimal places), second by decreasing size of the total number of live births. Infant mortality data by race/ethnicity is based on the mother's race/ethnicity reported on the birth record, and are grouped according to the latest methodology used by the State Data Center, Department of Finance to compile population estimates. For purposes of this report, rates with a relative standard error greater than or equal to 23% are considered "unreliable". The upper and lower limits of the birth case rate at the 95% confidence level indicate the precision of the estimated death rate. The wider the interval, the less precise the death rate. The upper and lower limits define the range within which the death rate would probably occur in 95 out of 100 independent sets of data similar to the present set. (See additional Technical Notes in the Appendix, pages 61 through 68).

DATA SOURCES

Department of Health Services: Birth Cohort-Perinatal Outcome Files, 1994-1996.

TABLE 17C
BLACK INFANT MORTALITY
RANKED BY THREE-YEAR AVERAGE BIRTH COHORT INFANT DEATH RATE
CALIFORNIA COUNTIES, 1994-1996

RANK ORDER	COUNTY	THREE-YEAR AVERAGE LIVE BIRTHS	THREE-YEAR AVERAGE INFANT DEATHS	BIRTH COHORT INFANT DEATH RATE	95% CONFIDENCE LIMITS LOWER	95% CONFIDENCE LIMITS UPPER
1	MARIN	76.3	0.0	0.0 +	-	-
2	BUTTE	47.3	0.0	0.0 +	-	-
3	MADERA	46.7	0.0	0.0 +	-	-
4	SANTA CRUZ	24.7	0.0	0.0 +	-	-
5	SHASTA	18.3	0.0	0.0 +	-	-
6	NAPA	12.7	0.0	0.0 +	-	-
7	SISKIYOU	6.0	0.0	0.0 +	-	-
8	EL DORADO	5.7	0.0	0.0 +	-	-
9	LASSEN	5.0	0.0	0.0 +	-	-
10	MENDOCINO	5.0	0.0	0.0 +	-	-
11	SAN BENITO	3.0	0.0	0.0 +	-	-
12	CALAVERAS	2.0	0.0	0.0 +	-	-
13	TUOLUMNE	1.7	0.0	0.0 +	-	-
14	MARIPOSA	1.3	0.0	0.0 +	-	-
15	PLUMAS	1.3	0.0	0.0 +	-	-
16	DEL NORTE	1.3	0.0	0.0 +	-	-
17	AMADOR	1.3	0.0	0.0 +	-	-
18	TRINITY	1.0	0.0	0.0 +	-	-
19	GLENN	1.0	0.0	0.0 +	-	-
20	COLUSA	0.7	0.0	0.0 +	-	-
21	INYO	0.7	0.0	0.0 +	-	-
22	MONO	0.3	0.0	0.0 +	-	-
23	NEVADA	0.0	0.0	0.0 +	-	-
24	MODOC	0.0	0.0	0.0 +	-	-
25	SIERRA	0.0	0.0	0.0 +	-	-
26	ALPINE	0.0	0.0	0.0 +	-	-
27	MERCED	159.7	0.7	4.2 *	0.0	14.2
28	TULARE	102.7	0.7	6.5 *	0.0	22.1
29	SONOMA	90.7	0.7	7.4 *	0.0	25.0
30	YUBA	37.7	0.3	8.8 *	0.0	38.9
31	MONTEREY	145.3	1.3	9.2 *	0.0	24.7
32	IMPERIAL	34.3	0.3	9.7 *	0.0	42.7
33	SANTA BARBARA	132.7	1.3	10.1 *	0.0	27.1
34	SANTA CLARA	852.7	8.7	10.2 *	3.4	16.9
35	SAN FRANCISCO	1,019.0	11.0	10.8 *	4.4	17.2
36	ALAMEDA	3,988.0	43.3	10.9	7.6	14.1
	YEAR 2000 NATIONAL OBJECTIVE:			11.		
37	SAN JOAQUIN	641.3	7.3	11.4 *	3.2	19.7
38	SOLANO	874.3	10.0	11.4 *	4.3	18.5
39	SAN LUIS OBISPO	28.7	0.3	11.6 *	0.0	51.1
40	ORANGE	799.0	10.0	12.5 *	4.8	20.3
41	SAN DIEGO	3,297.0	41.3	12.5	8.7	16.4
42	RIVERSIDE	1,475.7	19.0	12.9	7.1	18.7
43	SACRAMENTO	2,246.0	29.0	12.9	8.2	17.6
	CALIFORNIA	**39,259.3**	**538.0**	**13.7**	**12.5**	**14.9**
44	SAN MATEO	404.0	5.7	14.0 *	2.5	25.6
45	CONTRA COSTA	1,429.7	20.7	14.5	8.2	20.7
46	LOS ANGELES	16,231.0	236.7	14.6	12.7	16.4
47	SAN BERNARDINO	2,781.0	41.7	15.0	10.4	19.5
48	VENTURA	217.3	4.0	18.4 *	0.4	36.4
49	FRESNO	871.3	17.0	19.5 *	10.2	28.8
50	LAKE	17.0	0.3	19.6 *	0.0	86.2
51	KINGS	117.0	2.3	19.9 *	0.0	45.5
52	YOLO	45.3	1.0	22.1 *	0.0	65.3
53	STANISLAUS	163.3	3.7	22.4 *	0.0	45.4
54	HUMBOLDT	14.7	0.3	22.7 *	0.0	99.9
55	KERN	739.0	17.7	23.9 *	12.8	35.1
56	PLACER	19.0	0.7	35.1 *	0.0	119.3
57	SUTTER	17.7	0.7	37.7 *	0.0	128.3
58	TEHAMA	4.0	0.3	83.3 *	0.0	366.2

TABLE 17D: HISPANIC INFANT MORTALITY, 1994-1996

California Counties Ranked By Three-Year Average Birth Cohort Infant Death Rate

The Hispanic birth cohort infant death rate for California was 6.0 deaths per 1,000 live births, a risk of dying equivalent to approximately one infant death for every 167 births. This rate was based on the 1,531.3 deaths among 255,346.3 live births, the three-year average from 1994 to 1996.

Among counties with "reliable" rates, the birth cohort infant death rate ranged from 9.6 in Kern County to 4.7 in Alameda County, a difference in rates by a factor of 2.0 to 1.

A Year 2000 National Objective for a Hispanic birth cohort infant death rate has not been established.

Notes:

Infant deaths are deaths that occurred during the first year of life. Birth cohort infant death rates are per 1,000 live births. The birth cohort infant death rate is based upon births during a calendar year (a cohort) tracked individually for 365 days to determine whether or not death occurred. Thus, the deaths in the numerator of a birth cohort infant death rate are the records of the same infants as the births in the denominator. Birth cohort infant death rates, like population crude death rates, show the true risk of dying, but in addition, like age-adjusted population death rates, allow direct comparisons between counties.

* Death rate unreliable, relative standard error is greater than or equal to 23%.
+ Standard error indeterminate, death rate based on no (zero) deaths.
- Upper and lower limits at the 95% confidence level are not calculated for no (zero) deaths.

Counties were rank ordered first by increasing birth cohort death rate (calculated to 15 decimal places), second by decreasing size of the total number of live births. Infant mortality data by race/ethnicity is based on the mother's race/ethnicity reported on the birth record, and are grouped according to the latest methodology used by the State Data Center, Department of Finance to compile population estimates. For purposes of this report, rates with a relative standard error greater than or equal to 23% are considered "unreliable". The upper and lower limits of the birth cohort death rate at the 95% confidence level indicate the precision of the estimated death rate. The wider the interval, the less precise the death rate. The upper and lower limits define the range within which the death rate would probably occur in 95 out of 100 independent sets of data similar to the present set. (See additional Technical Notes in the Appendix, pages 61 through 68).

DATA SOURCES

Department of Health Services: Birth Cohort-Perinatal Outcome Files, 1994-1996.

TABLE 17D
HISPANIC INFANT MORTALITY
RANKED BY THREE-YEAR AVERAGE BIRTH COHORT INFANT DEATH RATE
CALIFORNIA COUNTIES, 1994-1996

RANK ORDER	COUNTY	THREE-YEAR AVERAGE LIVE BIRTHS	THREE-YEAR AVERAGE INFANT DEATHS	BIRTH COHORT INFANT DEATH RATE	95% CONFIDENCE LIMITS LOWER	95% CONFIDENCE LIMITS UPPER
				YEAR 2000 NATIONAL OBJECTIVE: NONE ESTABLISHED		
1	LAKE	103.0	0.0	0.0 +	-	-
2	SISKIYOU	84.7	0.0	0.0 +	-	-
3	MONO	43.7	0.0	0.0 +	-	-
4	DEL NORTE	42.0	0.0	0.0 +	-	-
5	CALAVERAS	31.0	0.0	0.0 +	-	-
6	MARIPOSA	16.7	0.0	0.0 +	-	-
7	PLUMAS	16.0	0.0	0.0 +	-	-
8	TRINITY	3.3	0.0	0.0 +	-	-
9	SIERRA	1.7	0.0	0.0 +	-	-
10	ALPINE	0.3	0.0	0.0 +	-	-
11	TEHAMA	198.3	0.3	1.7 *	0.0	7.4
12	GLENN	176.7	0.3	1.9 *	0.0	8.3
13	BUTTE	374.0	1.0	2.7 *	0.0	7.9
14	SAN MATEO	3,227.7	10.0	3.1 *	1.2	5.0
15	SOLANO	1,172.3	5.0	4.3 *	0.5	8.0
16	SHASTA	151.3	0.7	4.4 *	0.0	15.0
17	ALAMEDA	5,037.3	23.7	4.7	2.8	6.6
18	IMPERIAL	2,220.7	10.7	4.8 *	1.9	7.7
19	YUBA	197.0	1.0	5.1 *	0.0	15.0
20	SONOMA	1,468.0	7.7	5.2 *	1.5	8.9
21	SANTA BARBARA	3,315.7	17.3	5.2 *	2.8	7.7
22	SAN DIEGO	18,426.0	98.0	5.3	4.3	6.4
23	CONTRA COSTA	2,736.3	15.0	5.5 *	2.7	8.3
24	ORANGE	23,142.0	127.7	5.5	4.6	6.5
25	SANTA CLARA	9,184.3	53.0	5.8	4.2	7.3
26	INYO	57.3	0.3	5.8 *	0.0	25.6
27	MARIN	515.3	3.0	5.8 *	0.0	12.4
28	SAN FRANCISCO	1,943.3	11.3	5.8 *	2.4	9.2
29	PLACER	398.0	2.3	5.9 *	0.0	13.4
30	LOS ANGELES	107,262.0	632.0	5.9	5.4	6.4
31	MERCED	1,974.7	11.7	5.9 *	2.5	9.3
32	SANTA CRUZ	1,688.0	10.0	5.9 *	2.3	9.6
33	SAN JOAQUIN	3,373.0	20.3	6.0	3.4	8.6
	CALIFORNIA	**255,346.3**	**1,531.3**	**6.0**	**5.7**	**6.3**
34	SUTTER	328.3	2.0	6.1 *	0.0	14.5
35	MONTEREY	4,348.0	26.7	6.1	3.8	8.5
36	VENTURA	5,389.7	33.3	6.2	4.1	8.3
37	SAN LUIS OBISPO	699.0	4.3	6.2 *	0.4	12.0
38	STANISLAUS	2,937.3	18.3	6.2 *	3.4	9.1
39	NAPA	578.7	3.7	6.3 *	0.0	12.8
40	TULARE	4,556.7	29.3	6.4	4.1	8.8
41	RIVERSIDE	11,768.0	76.3	6.5	5.0	7.9
42	TUOLUMNE	50.3	0.3	6.6 *	0.0	29.1
43	SACRAMENTO	3,568.7	23.7	6.6	4.0	9.3
44	SAN BERNARDINO	13,957.3	96.3	6.9	5.5	8.3
45	FRESNO	7,981.0	60.0	7.5	5.6	9.4
46	SAN BENITO	482.0	3.7	7.6 *	0.0	15.4
47	YOLO	821.7	6.3	7.7 *	1.7	13.7
48	MADERA	1,203.3	9.3	7.8 *	2.8	12.7
49	EL DORADO	298.3	2.3	7.8 *	0.0	17.9
50	HUMBOLDT	127.0	1.0	7.9 *	0.0	23.3
51	NEVADA	83.3	0.7	8.0 *	0.0	27.2
52	KINGS	1,115.3	9.3	8.4 *	3.0	13.7
53	COLUSA	195.0	1.7	8.5 *	0.0	21.5
54	LASSEN	35.3	0.3	9.3 *	0.0	41.1
55	KERN	5,887.0	56.3	9.6	7.1	12.1
56	MENDOCINO	300.3	3.0	10.0 *	0.0	21.3
57	MODOC	26.7	0.3	12.5 *	0.0	54.9
58	AMADOR	26.0	0.3	12.8 *	0.0	56.3

TABLE 17E: WHITE INFANT MORTALITY, 1994-1996

California Counties Ranked By Three-Year Average Birth Cohort Infant Death Rate

The White birth cohort infant death rate for California was 5.9 deaths per 1,000 live births, a risk of dying equivalent to approximately one infant death for every 170 births. This rate was based on the 1,163.0 deaths among 197,808.7 live births, the three-year average from 1994 to 1996.

Among counties with "reliable" rates, the birth cohort infant death rate ranged from 9.5 in Kern County to 4.3 in Ventura and Contra Costa County, a difference in rates by a factor of 2.2 to 1.

A Year 2000 National Objective for a White birth cohort infant death rate has not been established.

Notes:

Infant deaths are deaths that occurred during the first year of life. Birth cohort infant death rates are per 1,000 live births. The birth cohort infant death rate is based upon births during a calendar year (a cohort) tracked individually for 365 days to determine whether or not death occurred. Thus, the deaths in the numerator of a birth cohort infant death rate are the records of the same infants as the births in the denominator. Birth cohort infant death rates, like population crude death rates, show the true risk of dying and also, like age-adjusted population rates, allow direct comparisons between counties.

*	Death rate unreliable, relative standard error is greater than or equal to 23%.
+	Standard error indeterminate, death rate based on no (zero) deaths.
-	Upper and lower limits at the 95% confidence level are not calculated for no (zero) deaths.

Counties were rank ordered first by increasing birth cohort death rate (calculated to 15 decimal places), second by decreasing size of the total number of live births. Infant mortality data by race/ethnicity is based on the mother's race/ethnicity reported on the birth record, and are grouped according to the latest methodology used by the State Data Center, Department of Finance to compile population estimates. For purposes of this report, rates with a relative standard error greater than or equal to 23% are considered "unreliable". The upper and lower limits of the birth cohort death rate at the 95% confidence level indicate the precision of the estimated death rate. The wider the interval, the less precise the death rate. The upper and lower limits define the range within which the death rate would probably occur in 95 out of 100 independent sets of data similar to the present set. (See additional Technical Notes in the Appendix, pages 61 through 68).

DATA SOURCES

Department of Health Services: Birth Cohort-Perinatal Outcome Files, 1994-1996.

TABLE 17E
WHITE INFANT MORTALITY
RANKED BY THREE-YEAR AVERAGE BIRTH COHORT INFANT DEATH RATE
CALIFORNIA COUNTIES, 1994-1996

RANK ORDER	COUNTY	THREE-YEAR AVERAGE LIVE BIRTHS	THREE-YEAR AVERAGE INFANT DEATHS	BIRTH COHORT INFANT DEATH RATE	95% CONFIDENCE LIMITS LOWER	95% CONFIDENCE LIMITS UPPER
YEAR 2000 NATIONAL OBJECTIVE: NONE ESTABLISHED						
1	MONO	77.7	0.0	0.0 +	-	-
2	SIERRA	17.0	0.0	0.0 +	-	-
3	ALPINE	2.7	0.0	0.0 +	-	-
4	SAN BENITO	278.0	0.7	2.4 *	0.0	8.2
5	MARIPOSA	138.3	0.3	2.4 *	0.0	10.6
6	MARIN	1,906.7	7.0	3.7 *	1.0	6.4
7	NAPA	849.7	3.3	3.9 *	0.0	8.1
8	VENTURA	5,605.3	24.0	4.3	2.6	6.0
9	CONTRA COSTA	6,748.3	29.0	4.3	2.7	5.9
10	SONOMA	3,644.3	16.0	4.4 *	2.2	6.5
11	ALAMEDA	7,599.0	34.7	4.6	3.0	6.1
12	SAN MATEO	4,267.7	19.7	4.6	2.6	6.6
13	SAN FRANCISCO	2,633.3	12.3	4.7 *	2.1	7.3
14	SANTA BARBARA	2,328.7	11.0	4.7 *	1.9	7.5
15	ORANGE	19,220.7	91.3	4.8	3.8	5.7
16	SAN LUIS OBISPO	1,801.3	8.7	4.8 *	1.6	8.0
17	MADERA	682.7	3.3	4.9 *	0.0	10.1
18	SANTA CLARA	9,828.7	48.7	5.0	3.6	6.3
19	MONTEREY	1,950.3	10.0	5.1 *	1.9	8.3
20	SAN DIEGO	19,805.3	102.7	5.2	4.2	6.2
21	EL DORADO	1,348.7	7.0	5.2 *	1.3	9.0
22	LASSEN	242.7	1.3	5.5 *	0.0	14.8
23	SANTA CRUZ	1,696.7	9.3	5.5 *	2.0	9.0
24	LOS ANGELES	34,956.3	197.3	5.6	4.9	6.4
25	PLACER	2,238.3	12.7	5.7 *	2.5	8.8
26	GLENN	229.3	1.3	5.8 *	0.0	15.7
27	COLUSA	113.3	0.7	5.9 *	0.0	20.0
	CALIFORNIA	**197,808.7**	**1,163.0**	**5.9**	**5.5**	**6.2**
28	YUBA	717.0	4.3	6.0 *	0.4	11.7
29	MENDOCINO	703.3	4.3	6.2 *	0.4	12.0
30	LAKE	483.3	3.0	6.2 *	0.0	13.2
31	SOLANO	2,882.0	18.3	6.4 *	3.4	9.3
32	NEVADA	721.7	4.7	6.5 *	0.6	12.3
33	TULARE	2,246.0	14.7	6.5 *	3.2	9.9
34	SACRAMENTO	9,877.3	67.0	6.8	5.2	8.4
35	STANISLAUS	3,683.3	25.0	6.8	4.1	9.4
36	SISKIYOU	379.0	2.7	7.0 *	0.0	15.5
37	PLUMAS	140.7	1.0	7.1 *	0.0	21.0
38	AMADOR	233.7	1.7	7.1 *	0.0	18.0
39	SAN BERNARDINO	11,956.0	86.3	7.2	5.7	8.7
40	SHASTA	1,749.7	12.7	7.2 *	3.3	11.2
41	RIVERSIDE	9,811.0	71.3	7.3	5.6	9.0
42	YOLO	1,139.3	8.3	7.3 *	2.3	12.3
43	TUOLUMNE	407.3	3.0	7.4 *	0.0	15.7
44	TEHAMA	495.7	3.7	7.4 *	0.0	15.0
45	SAN JOAQUIN	3,641.7	27.3	7.5	4.7	10.3
46	HUMBOLDT	1,224.3	9.3	7.6 *	2.7	12.5
47	IMPERIAL	339.0	2.7	7.9 *	0.0	17.3
48	SUTTER	656.0	5.3	8.1 *	1.2	15.0
49	TRINITY	117.7	1.0	8.5 *	0.0	25.2
50	FRESNO	4,260.3	36.7	8.6	5.8	11.4
51	MERCED	1,320.7	12.3	9.3 *	4.1	14.6
52	KERN	4,957.0	47.0	9.5	6.8	12.2
53	KINGS	868.3	8.3	9.6 *	3.1	16.1
54	INYO	134.0	1.3	10.0 *	0.0	26.8
55	BUTTE	1,817.7	18.3	10.1 *	5.5	14.7
56	DEL NORTE	237.0	3.0	12.7 *	0.0	27.0
57	CALAVERAS	311.7	4.7	15.0 *	1.4	28.6
58	MODOC	86.0	1.3	15.5 *	0.0	41.8

TABLE 18: LOW BIRTHWEIGHT INFANTS, 1996-1998

California Counties Ranked By Percentage of Three-Year Average Low Birthweight Infants

The relative number of low birthweight infants for California was 6.1 per 100 live births. This percentage was based on a three-year average number of low birthweight infants of 32,439.7 and a three-year average total number of live births of 527,999.3 from 1996 to 1998.

Among counties with "reliable" percentages, the percent of low birthweight infants ranged from 7.0 in Alameda County to 4.5 in Napa County, a difference in percentage by a factor of 1.6 to 1.

Altogether 14 counties (seven with reliable percentages), but not California, met the Year 2000 National Objective of 5.0 percent low birthweight infants.

Notes:

Low birthweight includes infants less than 2500 grams at birth. The average number of live births excludes those births of unknown birthweight.

*   Percentage unreliable, relative standard error is greater than or equal to 23%.
\+   Standard error indeterminate, percent based on no (zero) low birthweight infants.
\-   Upper and lower limits at the 95% confidence level are not calculated for no (zero) low birthweight infants.

Counties were rank ordered first by increasing percentage of low birthweight infants (calculated to 15 decimal places), second by decreasing size of the total number of live births. For purposes of this report, percentages with a relative standard error greater than or equal to 23% are considered "unreliable". The upper and lower limits of the percent of births at the 95% confidence level indicate the precision of the estimated percentage. The wider the interval, the less precise the percent. The upper and lower limits define the range within which the percentage would probably occur in 95 out 100 independent sets of data similar to the present set. (See additional Technical Notes in the Appendix, pages 61 through 68).

DATA SOURCES

Department of Health Services: Birth Statistical Master Files, 1996-1998.

TABLE 18
LOW BIRTHWEIGHT INFANTS
RANKED BY THREE-YEAR AVERAGE LOW BIRTHWEIGHT PERCENTAGE
CALIFORNIA COUNTIES, 1996-1998

RANK ORDER	COUNTY	1996-1998 LIVE BIRTHS (AVERAGE) TOTAL NUMBER	LOW BIRTHWEIGHT NUMBER	LOW BIRTHWEIGHT PERCENT	95% CONFIDENCE LIMITS LOWER	UPPER
1	SIERRA	15.7	0.0	0.0 +	-	-
2	ALPINE	10.7	0.0	0.0 +	-	-
3	PLUMAS	143.3	5.3	3.7 *	0.5	6.8
4	LASSEN	306.0	12.3	4.0 *	1.8	6.3
5	GLENN	415.7	17.0	4.1 *	2.1	6.0
6	NAPA	1,495.0	66.7	4.5	3.4	5.5
7	TEHAMA	650.0	29.7	4.6	2.9	6.2
8	SAN BENITO	859.0	39.7	4.6	3.2	6.1
9	CALAVERAS	311.7	14.7	4.7 *	2.3	7.1
10	HUMBOLDT	1,478.3	70.0	4.7	3.6	5.8
11	BUTTE	2,331.7	110.7	4.7	3.9	5.6
12	COLUSA	307.7	14.7	4.8 *	2.3	7.2
13	PLACER	2,680.0	130.3	4.9	4.0	5.7
14	SANTA CRUZ	3,466.3	172.7	5.0	4.2	5.7
	YEAR 2000 NATIONAL OBJECTIVE:			**5.0**		
15	SHASTA	1,997.7	101.3	5.1	4.1	6.1
16	SONOMA	5,461.3	279.3	5.1	4.5	5.7
17	SAN LUIS OBISPO	2,450.7	126.3	5.2	4.3	6.1
18	MONTEREY	6,721.7	349.7	5.2	4.7	5.7
19	MADERA	2,022.3	107.0	5.3	4.3	6.3
20	ORANGE	47,226.0	2,515.7	5.3	5.1	5.5
21	AMADOR	274.0	14.7	5.4 *	2.6	8.1
22	IMPERIAL	2,459.3	133.0	5.4	4.5	6.3
23	MARIN	2,620.3	142.0	5.4	4.5	6.3
24	SISKIYOU	472.7	25.7	5.4	3.3	7.5
25	MENDOCINO	1,042.7	56.7	5.4	4.0	6.9
26	VENTURA	11,507.0	630.0	5.5	5.0	5.9
27	LAKE	570.7	31.3	5.5	3.6	7.4
28	TULARE	7,005.7	387.3	5.5	5.0	6.1
29	DEL NORTE	324.0	18.0	5.6 *	3.0	8.1
30	NEVADA	782.3	44.0	5.6	4.0	7.3
31	MONO	124.3	7.0	5.6 *	1.5	9.8
32	TUOLUMNE	453.0	25.7	5.7	3.5	7.9
33	YOLO	2,136.0	123.3	5.8	4.8	6.8
34	MODOC	97.7	5.7	5.8 *	1.0	10.6
35	KINGS	2,167.3	127.0	5.9	4.8	6.9
36	SAN DIEGO	43,851.7	2,578.3	5.9	5.7	6.1
37	SANTA BARBARA	5,843.3	348.3	6.0	5.3	6.6
38	SANTA CLARA	26,572.7	1,587.3	6.0	5.7	6.3
39	EL DORADO	1,669.0	101.0	6.1	4.9	7.2
40	MERCED	3,624.0	220.7	6.1	5.3	6.9
41	SAN MATEO	10,077.3	618.0	6.1	5.6	6.6
	CALIFORNIA	**527,999.3**	**32,439.7**	**6.1**	**6.1**	**6.2**
42	KERN	11,449.3	716.0	6.3	5.8	6.7
43	RIVERSIDE	23,339.3	1,468.3	6.3	6.0	6.6
44	CONTRA COSTA	12,361.0	781.3	6.3	5.9	6.8
45	SOLANO	5,596.3	355.3	6.3	5.7	7.0
46	MARIPOSA	141.3	9.0	6.4 *	2.2	10.5
47	STANISLAUS	6,961.0	447.7	6.4	5.8	7.0
48	LOS ANGELES	163,197.3	10,552.0	6.5	6.3	6.6
49	SUTTER	1,170.3	75.7	6.5	5.0	7.9
50	FRESNO	14,370.7	934.7	6.5	6.1	6.9
51	SAN JOAQUIN	8,714.7	567.3	6.5	6.0	7.0
52	INYO	204.0	13.3	6.5 *	3.0	10.0
53	SAN BERNARDINO	28,639.7	1,869.0	6.5	6.2	6.8
54	SACRAMENTO	17,637.3	1,162.3	6.6	6.2	7.0
55	TRINITY	122.0	8.3	6.8 *	2.2	11.4
56	SAN FRANCISCO	8,240.0	561.0	6.8	6.2	7.4
57	YUBA	1,041.0	71.0	6.8	5.2	8.4
58	ALAMEDA	20,788.3	1,459.3	7.0	6.7	7.4

TABLE 19: BIRTHS TO ADOLESCENT MOTHERS, 15 TO 19 YEARS OLD, 1996-1998

California Counties Ranked By Three-Year Average Age-Specific Birth Rate

The age-specific birth rate to adolescents, age 15 to 19, in California was 57.2 per 1,000 female population, a rate equivalent to approximately one birth for every 17 adolescent females. This rate was based on a three-year average number of births of 60,370.0 to adolescents from 1996 to 1998, and a female population of 1,055,075 for the same age group as of July 1, 1997.

Among counties with "reliable" rates, the age-specific rate ranged from 88.3 in Kings County to 17.7 in Marin County, a difference in rates by a factor of 5.0 to 1.

A Year 2000 National Objective for births to adolescents 15 to 19 years old has not been established.

Notes:

*   Age-specific rate unreliable, relative standard error is greater than or equal to 23%.

Counties were rank ordered first by increasing age-specific birth rate (calculated to 15 decimal places), second by decreasing size of population. For purposes of this report, rates with a relative standard error greater than or equal to 23% are considered "unreliable". The upper and lower limits of the age-specific birth rate at the 95% confidence level indicate the precision of the estimated birth rate. The wider the interval, the less precise the birth rate. The upper and lower limits define the range within which the birth rate would probably occur in 95 out of 100 independent sets of data similar to the present set. (See additional Technical Notes in the Appendix, pages 61 through 68).

DATA SOURCES

Department of Health Services: Birth Statistical Master Files, 1996-1998.
Department of Finance: 1997 Race/Ethnic Population by County with Age and Sex Detail, June 1999.

TABLE 19
BIRTHS AMONG ADOLESCENT MOTHERS, 15 TO 19 YEARS OLD
RANKED BY THREE-YEAR AVERAGE AGE-SPECIFIC BIRTH RATE
CALIFORNIA COUNTIES, 1996-1998

RANK ORDER	COUNTY	1997 FEMALE POPULATION 15-19 YRS OLD	1996-1998 LIVE BIRTHS (AVERAGE)	AGE-SPECIFIC BIRTH RATE	95% CONFIDENCE LIMITS	
					LOWER	UPPER
		YEAR 2000 NATIONAL OBJECTIVE: NONE ESTABLISHED				
1	SIERRA	135	2.0	14.8 *	0.0	35.3
2	MARIN	5,830	103.0	17.7	14.3	21.1
3	PLUMAS	786	19.7	25.0	14.0	36.1
4	PLACER	7,862	212.3	27.0	23.4	30.6
5	NEVADA	3,168	86.7	27.4	21.6	33.1
6	CALAVERAS	1,349	37.0	27.4	18.6	36.3
7	SAN LUIS OBISPO	8,932	249.0	27.9	24.4	31.3
8	EL DORADO	5,344	151.3	28.3	23.8	32.8
9	AMADOR	1,036	33.0	31.9	21.0	42.7
10	MARIPOSA	493	16.0	32.5 *	16.6	48.4
11	YOLO	6,965	228.7	32.8	28.6	37.1
12	SAN FRANCISCO	16,607	553.3	33.3	30.5	36.1
13	ALPINE	40	1.3	33.3 *	0.0	89.9
14	MONO	307	10.7	34.7 *	13.9	55.6
15	SAN MATEO	19,298	689.0	35.7	33.0	38.4
16	TUOLUMNE	1,717	62.3	36.3	27.3	45.3
17	SONOMA	13,922	508.7	36.5	33.4	39.7
18	CONTRA COSTA	28,726	1,050.7	36.6	34.4	38.8
19	NAPA	3,783	140.7	37.2	31.0	43.3
20	TRINITY	477	19.7	41.2	23.0	59.5
21	HUMBOLDT	4,520	187.7	41.5	35.6	47.5
22	SISKIYOU	1,723	73.7	42.8	33.0	52.5
23	SANTA CRUZ	8,239	353.3	42.9	38.4	47.4
24	ALAMEDA	41,159	1,787.3	43.4	41.4	45.4
25	SANTA CLARA	47,962	2,099.3	43.8	41.9	45.6
26	LASSEN	1,036	46.0	44.4	31.6	57.2
27	VENTURA	24,696	1,101.0	44.6	41.9	47.2
28	SOLANO	13,785	654.0	47.4	43.8	51.1
29	MODOC	409	19.7	48.1	26.8	69.3
30	MENDOCINO	3,148	154.0	48.9	41.2	56.6
31	COLUSA	766	38.7	50.5	34.6	66.4
32	ORANGE	77,688	3,963.0	51.0	49.4	52.6
33	SAN DIEGO	84,973	4,433.3	52.2	50.6	53.7
34	SANTA BARBARA	13,484	705.7	52.3	48.5	56.2
35	INYO	631	33.7	53.4	35.3	71.4
36	SHASTA	5,990	320.0	53.4	47.6	59.3
37	BUTTE	6,621	354.7	53.6	48.0	59.1
38	SUTTER	2,706	147.7	54.6	45.8	63.4
39	TEHAMA	2,023	110.7	54.7	44.5	64.9
40	SACRAMENTO	38,617	2,113.3	54.7	52.4	57.1
41	GLENN	1,138	63.0	55.4	41.7	69.0
	CALIFORNIA	**1,055,075**	**60,370.0**	**57.2**	**56.8**	**57.7**
42	LAKE	1,866	108.7	58.2	47.3	69.2
43	DEL NORTE	1,017	60.3	59.3	44.4	74.3
44	STANISLAUS	16,711	1,038.7	62.2	58.4	65.9
45	IMPERIAL	6,267	393.3	62.8	56.6	69.0
46	LOS ANGELES	289,341	18,803.7	65.0	64.1	65.9
47	SAN JOAQUIN	20,090	1,307.7	65.1	61.6	68.6
48	RIVERSIDE	49,578	3,237.3	65.3	63.0	67.5
49	SAN BENITO	1,782	117.3	65.8	53.9	77.8
50	SAN BERNARDINO	60,078	4,172.3	69.4	67.3	71.6
51	YUBA	2,328	168.0	72.2	61.3	83.1
52	MERCED	8,313	617.3	74.3	68.4	80.1
53	MONTEREY	11,983	899.0	75.0	70.1	79.9
54	KERN	23,665	1,944.3	82.2	78.5	85.8
55	FRESNO	30,254	2,503.7	82.8	79.5	86.0
56	MADERA	4,446	370.3	83.3	74.8	91.8
57	TULARE	15,025	1,319.0	87.8	83.0	92.5
58	KINGS	4,240	374.3	88.3	79.3	97.2

TABLE 20A: PRENATAL CARE NOT BEGUN DURING THE FIRST TRIMESTER OF PREGNANCY , 1996-1998

California Counties Ranked By Percentage of Three-Year Average Late/No Prenatal Care

The relative number of births to mothers with late or no prenatal care for California was 18.4 per 100 live births. This percentage was based on a three-year average number of births to mothers with late or no prenatal care of 95,979.0 and a three-year average total number of live births of 521,055.7 from 1996 to 1998.

Among counties with "reliable" percentages, the percent of births to mothers with late or no prenatal care ranged from 41.4 in Mendocino County to 11.0 in Sonoma County, a difference in percentage by a factor of 3.8 to 1.

None of the 58 counties, irrespective of the "reliability" of their percentages, nor California as a whole met the Year 2000 National Objective of not more than 10.0 percent of live births to mothers with late or no prenatal care.

Notes:

The average number of live births excludes those births with unknown prenatal care.

*   Percentage unreliable, relative standard error is greater than or equal to 23%.

Counties were rank ordered first by increasing percentage of births to mothers with late or no prenatal care (calculated to 15 decimal places), second by decreasing size of the total number of live births. For purposes of this report, percentages with a relative standard error greater than or equal to 23% are considered "unreliable". The upper and lower limits of the percent of births at the 95% confidence level indicate the precision of the estimated percentage. The wider the interval, the less precise the percent. The upper and lower limits define the range within which the percentage would probably occur in 95 out of 100 independent sets of data similar to the present set. (See additional Technical Notes in the Appendix, pages 61 through 68).

DATA SOURCES

Department of Health Services: Birth Statistical Master Files, 1996-1998.

PRENATAL CARE NOT BEGUN DURING THE FIRST TRIMESTER OF PREGNANCY
RANKED BY PERCENTAGE OF THREE-YEAR AVERAGE LATE / NO PRENATAL CARE
CALIFORNIA COUNTIES, 1996-1998

RANK ORDER	COUNTY	1996-1998 LIVE BIRTHS (AVERAGE)			95% CONFIDENCE LIMITS	
		TOTAL NUMBER	LATE/NO PRENATAL CARE			
			NUMBER	PERCENT	LOWER	UPPER
	YEAR 2000 NATIONAL OBJECTIVE:			10.0		
1	SONOMA	5,255.3	577.0	11.0	10.1	11.9
2	ALAMEDA	20,421.7	2,288.3	11.2	10.7	11.7
3	VENTURA	11,460.7	1,289.3	11.3	10.6	11.9
4	AMADOR	272.3	34.3	12.6	8.4	16.8
5	SAN FRANCISCO	8,189.3	1,097.3	13.4	12.6	14.2
6	CALAVERAS	308.7	42.0	13.6	9.5	17.7
7	CONTRA COSTA	12,042.7	1,656.0	13.8	13.1	14.4
8	SHASTA	1,992.3	276.0	13.9	12.2	15.5
9	TUOLUMNE	452.3	64.0	14.1	10.7	17.6
10	SAN MATEO	10,044.3	1,426.3	14.2	13.5	14.9
11	SANTA CLARA	26,041.3	3,741.3	14.4	13.9	14.8
12	MARIN	2,592.0	374.7	14.5	13.0	15.9
13	PLACER	2,655.3	388.3	14.6	13.2	16.1
14	EL DORADO	1,661.3	251.3	15.1	13.3	17.0
15	ORANGE	46,977.3	7,338.7	15.6	15.3	16.0
16	SANTA CRUZ	3,416.3	564.7	16.5	15.2	17.9
17	LOS ANGELES	161,220.3	26,829.7	16.6	16.4	16.8
18	SAN BENITO	849.3	147.0	17.3	14.5	20.1
	CALIFORNIA	521,055.7	95,979.0	18.4	18.3	18.5
19	SAN LUIS OBISPO	2,440.7	455.0	18.6	16.9	20.4
20	FRESNO	14,281.3	2,675.0	18.7	18.0	19.4
21	PLUMAS	143.0	27.3	19.1	11.9	26.3
22	NEVADA	779.7	149.7	19.2	16.1	22.3
23	STANISLAUS	6,936.0	1,350.7	19.5	18.4	20.5
24	SANTA BARBARA	5,814.0	1,170.7	20.1	19.0	21.3
25	TEHAMA	648.7	130.7	20.1	16.7	23.6
26	MADERA	2,014.3	413.0	20.5	18.5	22.5
27	SAN DIEGO	43,404.3	8,935.7	20.6	20.2	21.0
28	KINGS	2,154.0	461.7	21.4	19.5	23.4
29	NAPA	1,427.0	311.3	21.8	19.4	24.2
30	HUMBOLDT	1,463.0	319.3	21.8	19.4	24.2
31	SISKIYOU	466.7	102.7	22.0	17.7	26.3
32	TRINITY	122.0	27.0	22.1	13.8	30.5
33	MONTEREY	6,696.0	1,486.7	22.2	21.1	23.3
34	KERN	10,951.3	2,480.7	22.7	21.8	23.5
35	LASSEN	303.7	70.0	23.1	17.7	28.5
36	RIVERSIDE	23,106.7	5,429.0	23.5	22.9	24.1
37	DEL NORTE	322.3	77.0	23.9	18.6	29.2
38	SAN BERNARDINO	28,220.3	6,786.3	24.0	23.5	24.6
39	SACRAMENTO	17,402.7	4,194.3	24.1	23.4	24.8
40	MARIPOSA	139.7	34.7	24.8	16.6	33.1
41	SOLANO	5,211.0	1,416.3	27.2	25.8	28.6
42	SAN JOAQUIN	8,449.7	2,301.0	27.2	26.1	28.3
43	MONO	124.0	34.0	27.4	18.2	36.6
44	TULARE	6,891.7	1,899.7	27.6	26.3	28.8
45	YOLO	2,111.0	587.7	27.8	25.6	30.1
46	MODOC	97.0	27.7	28.5	17.9	39.2
47	IMPERIAL	2,446.7	700.3	28.6	26.5	30.7
48	BUTTE	2,327.0	678.3	29.2	27.0	31.3
49	GLENN	413.7	122.0	29.5	24.3	34.7
50	SIERRA	15.7	4.7	29.8 *	2.8	56.8
51	INYO	203.7	64.7	31.8	24.0	39.5
52	SUTTER	1,167.3	371.7	31.8	28.6	35.1
53	LAKE	564.0	184.3	32.7	28.0	37.4
54	MERCED	3,564.3	1,189.7	33.4	31.5	35.3
55	ALPINE	10.7	3.7	34.4 *	0.0	69.6
56	YUBA	1,038.3	377.7	36.4	32.7	40.0
57	COLUSA	307.0	118.0	38.4	31.5	45.4
58	MENDOCINO	1,022.7	423.0	41.4	37.4	45.3

TABLE 20B: "ADEQUATE/ADEQUATE PLUS" PRENATAL CARE (ADEQUACY OF PRENATAL CARE UTILIZATION INDEX), 1996-1998

California Counties Ranked By Percentage of Three-Year Average "Adequate/Adequate Plus" Prenatal Care

The relative number of births to mothers with "adequate/adequate plus" prenatal care for California was 70.5 per 100 live births. This percentage was based on a three-year average number of births to mothers with "adequate/adequate plus" prenatal care of 360,632.3 and a three-year average total number of live births of 511,842.3 from 1996 to 1998.

Among counties with "reliable" percentages, the percent of births to mothers with "adequate/adequate plus" prenatal care ranged from 81.4 in San Luis Obispo County to 48.2 in San Benito County, a difference in percentage by a factor of 1.7 to 1.

None of the 58 counties, irrespective of the "reliability" of their percentages, nor California as a whole met the Year 2010 National Objective of at least 90.0 percent of all live-born infants whose mothers received "adequate/adequate plus" prenatal care according to the Adequacy of Prenatal Care Utilization Index.

Notes:

The average total number of live births excludes "unknown" adequacy of prenatal care. The definition of "adequate/adequate plus" prenatal care includes mothers who initiated prenatal care by the fourth month of pregnancy and had greater than or equal to 80 percent of the expected number of prenatal care visits recommended by the American College of Obstetricians and Gynecologists.

*   Percentage unreliable, relative standard error is greater than or equal to 23%.

Counties were rank ordered first by decreasing percentage of births to mothers with "adequate/adequate plus" prenatal care (calculated to 15 decimal places), second by decreasing size of the total number of live births. For purposes of this report, percentages with a relative standard error greater than or equal to 23% are considered "unreliable". The upper and lower limits of the percent of births at the 95% confidence level indicate the precision of the estimated percentage. The wider the interval, the less precise the percent. The upper and lower limits define the range within which the percentage would probably occur in 95 out of 100 independent sets of data similar to the present set. (See additional Technical Notes in the Appendix, pages 61 through 68).

DATA SOURCES

Department of Health Services: Birth Statistical Master Files, 1996-1998.

TABLE 20B
"ADEQUATE/ADEQUATE PLUS" PRENATAL CARE (ADEQUACY OF PRENATAL CARE UTILIZATION INDEX)
RANKED BY PERCENTAGE OF THREE-YEAR AVERAGE "ADEQUATE/ADEQUATE PLUS" PRENATAL CARE
CALIFORNIA COUNTIES, 1996-1998

RANK ORDER	COUNTY	1996-1998 LIVE BIRTHS (AVERAGE)			95% CONFIDENCE LIMITS	
		TOTAL NUMBER	ADEQUATE/ADEQUATE PLUS CARE			
			NUMBER	PERCENT	LOWER	UPPER
		YEAR 2010 NATIONAL OBJECTIVE:		**90.0**		
1	SAN LUIS OBISPO	2,425.0	1,973.3	81.4	77.8	85.0
2	TUOLUMNE	452.0	367.7	81.3	73.0	89.7
3	VENTURA	11,361.3	9,125.0	80.3	78.7	82.0
4	SAN FRANCISCO	7,963.3	6,342.0	79.6	77.7	81.6
5	FRESNO	14,058.7	11,029.0	78.4	77.0	79.9
6	MARIN	2,572.0	2,001.3	77.8	74.4	81.2
7	MONO	124.0	95.7	77.2	61.7	92.6
8	ALAMEDA	20,068.3	15,462.3	77.0	75.8	78.3
9	LASSEN	303.0	232.0	76.6	66.7	86.4
10	PLACER	2,560.0	1,943.0	75.9	72.5	79.3
11	AMADOR	270.3	203.7	75.3	65.0	85.7
12	CALAVERAS	307.7	230.7	75.0	65.3	84.6
13	EL DORADO	1,631.3	1,221.0	74.8	70.6	79.0
14	SAN MATEO	9,990.7	7,427.7	74.3	72.7	76.0
15	ORANGE	46,159.3	33,995.7	73.6	72.9	74.4
16	LOS ANGELES	157,535.0	113,590.7	72.1	71.7	72.5
17	ALPINE	10.7	7.7	71.9 *	21.0	100.0
18	KINGS	2,150.0	1,534.3	71.4	67.8	74.9
19	GLENN	411.7	293.7	71.3	63.2	79.5
20	CONTRA COSTA	11,912.0	8,456.3	71.0	69.5	72.5
21	DEL NORTE	321.3	227.7	70.9	61.6	80.1
22	SONOMA	5,033.7	3,566.3	70.8	68.5	73.2
23	SANTA BARBARA	5,783.7	4,094.3	70.8	68.6	73.0
24	MADERA	1,994.3	1,410.0	70.7	67.0	74.4
	CALIFORNIA	**511,842.3**	**360,632.3**	**70.5**	**70.2**	**70.7**
25	TEHAMA	645.7	452.3	70.1	63.6	76.5
26	SAN DIEGO	43,149.0	29,863.3	69.2	68.4	70.0
27	BUTTE	2,315.7	1,602.0	69.2	65.8	72.6
28	INYO	203.0	139.3	68.6	57.2	80.0
29	SACRAMENTO	16,908.3	11,504.7	68.0	66.8	69.3
30	SANTA CLARA	25,971.3	17,583.7	67.7	66.7	68.7
31	SANTA CRUZ	3,346.3	2,241.7	67.0	64.2	69.8
32	MONTEREY	6,679.3	4,423.0	66.2	64.3	68.2
33	PLUMAS	143.0	94.7	66.2	52.9	79.5
34	SIERRA	15.7	10.3	66.0 *	25.7	100.0
35	MARIPOSA	139.7	92.0	65.9	52.4	79.3
36	IMPERIAL	2,436.3	1,592.7	65.4	62.2	68.6
37	SISKIYOU	460.7	301.0	65.3	58.0	72.7
38	RIVERSIDE	22,867.7	14,939.7	65.3	64.3	66.4
39	KERN	10,155.0	6,626.3	65.3	63.7	66.8
40	SUTTER	1,160.3	757.0	65.2	60.6	69.9
41	NAPA	1,419.3	921.0	64.9	60.7	69.1
42	SAN BERNARDINO	27,496.0	17,797.0	64.7	63.8	65.7
43	TULARE	6,871.3	4,432.3	64.5	62.6	66.4
44	SHASTA	1,986.7	1,267.7	63.8	60.3	67.3
45	NEVADA	774.7	483.0	62.3	56.8	67.9
46	YOLO	2,075.3	1,277.7	61.6	58.2	64.9
47	SAN JOAQUIN	8,160.3	4,994.7	61.2	59.5	62.9
48	STANISLAUS	6,921.7	4,176.0	60.3	58.5	62.2
49	YUBA	1,030.7	620.3	60.2	55.5	64.9
50	MERCED	3,558.7	2,131.7	59.9	57.4	62.4
51	SOLANO	5,166.7	3,092.3	59.9	57.7	62.0
52	LAKE	559.3	326.7	58.4	52.1	64.7
53	MENDOCINO	1,012.7	578.7	57.1	52.5	61.8
54	COLUSA	306.3	172.0	56.1	47.8	64.5
55	MODOC	95.7	52.3	54.7	39.9	69.5
56	HUMBOLDT	1,442.3	786.0	54.5	50.7	58.3
57	TRINITY	121.7	60.3	49.6	37.1	62.1
58	SAN BENITO	846.7	408.0	48.2	43.5	52.9

TABLE 21: BREASTFEEDING INITIATION DURING EARLY POSTPARTUM, 1996-1998

The relative number of breastfed infants for California was 78.4 per 100 hospital births. This percentage was based on a three-year average number of breastfed infants of 395,573.7 and a three-year average total number of hospital births of 504,876.0 from 1996 to 1998.

Among counties with "reliable" percentages, the percent of breastfed infants ranged from 92.4 in Santa Cruz County to 68.3 in Kings County, a difference in percentage by a factor of 1.4 to 1.

Altogether 47 counties (45 with reliable percentages) and California as a whole met the Year 2000 National Objective of at least 75.0 percent of all infants are breastfed during the early postpartum period.

Notes:

Breastfeeding initiation includes: exclusively breastfed infants; and combination breastfed and formula fed infants. The data include only births occurring in a California hospital. The average number of total hospital births excludes those of unknown feeding type.

*   Percentage unreliable, relative standard error is greater than or equal to 23%.

Counties were rank ordered first by decreasing percentage of breastfed infants (calculated to 15 decimal places), second by decreasing size of the total number of hospital births. For purposes of this report, percentages with a relative standard error greater than or equal to 23% are considered "unreliable". The upper and lower limits of the percent of breastfed infants at the 95% confidence level indicate the precision of the estimated percentage. The wider the interval, the less precise the percent. The upper and lower limits define the range within which the percentage would probably occur in 95 out 100 independent sets of data similar to the present set. (See additional Technical Notes in the Appendix, pages 61 through 68).

DATA SOURCES

Department of Health Services: Genetic Disease Branch, Newborn Screening Program.

TABLE 21
BREASTFEEDING INITIATION DURING EARLY POSTPARTUM
RANKED BY THREE-YEAR AVERAGE BREASTFEEDING INITIATION PERCENTAGE
CALIFORNIA COUNTIES, 1996-1998

RANK ORDER	COUNTY	1996-1998 HOSPITAL BIRTHS (AVERAGE) TOTAL NUMBER	BREASTFED NUMBER	BREASTFED PERCENT	95% CONFIDENCE LIMITS LOWER	95% CONFIDENCE LIMITS UPPER
1	SANTA CRUZ	3,431.0	3,171.3	92.4	89.2	95.6
2	MARIN	2,636.3	2,432.3	92.3	88.6	95.9
3	NEVADA	759.3	693.0	91.3	84.5	98.1
4	TRINITY	119.0	108.3	91.0	73.9	100.0
5	SIERRA	14.0	12.7	90.5 *	40.6	100.0
6	SAN LUIS OBISPO	2,425.3	2,188.7	90.2	86.5	94.0
7	SONOMA	5,222.7	4,674.3	89.5	86.9	92.1
8	INYO	311.0	278.3	89.5	79.0	100.0
9	MONTEREY	6,164.3	5,510.7	89.4	87.0	91.8
10	SAN MATEO	9,097.7	8,130.0	89.4	87.4	91.3
11	NAPA	1,370.3	1,207.7	88.1	83.2	93.1
12	HUMBOLDT	1,453.0	1,276.0	87.8	83.0	92.6
13	PLUMAS	133.0	116.7	87.7	71.8	100.0
14	DEL NORTE	329.3	288.7	87.7	77.5	97.8
15	EL DORADO	1,629.7	1,427.3	87.6	83.0	92.1
16	PLACER	2,259.7	1,975.7	87.4	83.6	91.3
17	SANTA BARBARA	5,616.7	4,900.7	87.3	84.8	89.7
18	MENDOCINO	1,029.3	897.0	87.1	81.4	92.8
19	LASSEN	272.0	236.7	87.0	75.9	98.1
20	MARIPOSA	127.0	110.3	86.9	70.7	100.0
21	GLENN	274.3	238.0	86.8	75.7	97.8
22	SANTA CLARA	26,459.7	22,838.0	86.3	85.2	87.4
23	MODOC	68.0	58.7	86.3	64.2	100.0
24	ALPINE	12.0	10.3	86.1 *	33.6	100.0
25	AMADOR	275.0	235.7	85.7	74.8	96.6
26	TUOLUMNE	488.3	418.0	85.6	77.4	93.8
27	YOLO	2,067.0	1,765.0	85.4	81.4	89.4
28	SHASTA	1,944.3	1,655.7	85.2	81.1	89.3
29	VENTURA	10,768.3	9,152.7	85.0	83.3	86.7
30	CONTRA COSTA	11,982.0	10,130.0	84.5	82.9	86.2
31	SISKIYOU	333.7	282.0	84.5	74.7	94.4
32	SAN DIEGO	38,077.3	31,926.0	83.8	82.9	84.8
33	SAN BENITO	788.7	659.0	83.6	77.2	89.9
34	CALAVERAS	252.7	208.0	82.3	71.1	93.5
35	BUTTE	2,355.0	1,929.0	81.9	78.3	85.6
36	SAN FRANCISCO	8,341.0	6,830.3	81.9	79.9	83.8
37	ALAMEDA	20,074.3	16,388.0	81.6	80.4	82.9
38	MONO	38.0	31.0	81.6	52.9	100.0
39	COLUSA	296.7	237.3	80.0	69.8	90.2
40	TEHAMA	656.0	524.7	80.0	73.1	86.8
41	LAKE	536.3	428.3	79.9	72.3	87.4
42	ORANGE	46,013.3	36,284.0	78.9	78.0	79.7
43	SOLANO	4,761.0	3,741.0	78.6	76.1	81.1
	CALIFORNIA	**504,876.0**	**395,573.7**	**78.4**	**78.1**	**78.6**
44	SUTTER	1,213.0	947.0	78.1	73.1	83.0
45	SACRAMENTO	16,704.3	12,907.0	77.3	75.9	78.6
46	SAN JOAQUIN	8,440.3	6,401.0	75.8	74.0	77.7
47	LOS ANGELES	159,154.0	119,529.0	75.1	74.7	75.5
	YEAR 2000 NATIONAL OBJECTIVE:			**75.0**		
48	TULARE	6,492.0	4,854.7	74.8	72.7	76.9
49	IMPERIAL	2,446.0	1,815.3	74.2	70.8	77.6
50	MADERA	2,015.0	1,495.3	74.2	70.4	78.0
51	FRESNO	13,896.3	10,265.7	73.9	72.4	75.3
52	STANISLAUS	6,781.7	4,973.3	73.3	71.3	75.4
53	KERN	10,966.0	7,877.3	71.8	70.2	73.4
54	RIVERSIDE	22,193.0	15,858.3	71.5	70.3	72.6
55	MERCED	3,384.0	2,345.0	69.3	66.5	72.1
56	SAN BERNARDINO	27,175.7	18,811.0	69.2	68.2	70.2
57	YUBA	884.0	610.3	69.0	63.6	74.5
58	KINGS	1,867.0	1,275.7	68.3	64.6	72.1

TABLE 22: PERSONS UNDER 18 BELOW POVERTY, 1990 CENSUS

California Counties Ranked By Percentage of Census Population Under 18 Below Poverty

The relative number of persons under 18 who were in poverty in California was 18.2 per 100 population under 18. This percentage was based on the 1990 Census.

All 58 counties had "reliable" percentages of persons under 18 years of age below poverty. The percents ranged from 33.2 in Tulare County to 6.3 in Marin County, a difference in percentage by a factor of 5.3 to 1.

A Year 2000 National Objective for the percentage of persons under 18 years of age who are below poverty has not been established.

Notes:

Percentages are based on the population under 18 years of age for which the poverty status was determined and excludes persons of unknown poverty status.

Counties were rank ordered first by increasing percentage of persons under 18 in poverty (calculated to 15 decimal places), second by decreasing size of the same age group population. The upper and lower limits of the percent of persons under 18 years of age in poverty at the 95% confidence level indicate the precision of the estimated percentage. The wider the interval, the less precise the percentage. The upper and lower limits define the range within which the estimated percentage would probably occur in 95 out of 100 independent sets of data similar to the present set. (See additional Technical Notes in the Appendix, pages 61 through 68).

DATA SOURCES

Department of Finance: State Census Data Center, 1990 Census, Summary Tape File P117/118.

TABLE 22
PERSONS UNDER 18 BELOW POVERTY
RANKED BY PERCENTAGE OF CENSUS POPULATION UNDER 18 BELOW POVERTY
CALIFORNIA COUNTIES, 1990

RANK ORDER	COUNTY	POPULATION	UNDER 18		95% CONFIDENCE LIMITS	
			IN POVERTY			
			NUMBER	PERCENT	LOWER	UPPER
		YEAR 2000 NATIONAL OBJECTIVE:		NONE ESTABLISHED		
1	MARIN	43,099	2,728	6.3	6.1	6.6
2	SAN MATEO	138,532	11,207	8.1	7.9	8.2
3	PLACER	44,502	4,064	9.1	8.9	9.4
4	SIERRA	710	67	9.4	7.2	11.7
5	SONOMA	93,032	8,989	9.7	9.5	9.9
6	NAPA	25,234	2,442	9.7	9.3	10.1
7	EL DORADO	32,426	3,281	10.1	9.8	10.5
8	VENTURA	178,737	18,305	10.2	10.1	10.4
9	NEVADA	18,427	1,915	10.4	9.9	10.9
10	SANTA CLARA	349,495	36,759	10.5	10.4	10.6
11	SOLANO	95,907	10,153	10.6	10.4	10.8
12	CONTRA COSTA	197,901	21,904	11.1	10.9	11.2
13	MONO	2,360	264	11.2	9.8	12.5
14	ORANGE	573,127	65,463	11.4	11.3	11.5
15	SANTA CRUZ	52,656	6,280	11.9	11.6	12.2
16	AMADOR	5,506	676	12.3	11.4	13.2
17	SAN BENITO	11,265	1,453	12.9	12.2	13.6
18	SAN LUIS OBISPO	46,527	6,232	13.4	13.1	13.7
19	TUOLUMNE	10,656	1,435	13.5	12.8	14.2
20	MARIPOSA	3,130	455	14.5	13.2	15.9
21	ALAMEDA	297,681	45,747	15.4	15.2	15.5
22	SANTA BARBARA	83,327	12,829	15.4	15.1	15.7
23	RIVERSIDE	326,377	51,608	15.8	15.7	15.9
24	CALAVERAS	7,693	1,222	15.9	15.0	16.8
25	SAN DIEGO	596,807	96,720	16.2	16.1	16.3
26	MONTEREY	95,470	16,255	17.0	16.8	17.3
27	INYO	4,395	753	17.1	15.9	18.4
28	COLUSA	4,948	858	17.3	16.2	18.5
29	YOLO	32,928	5,774	17.5	17.1	18.0
30	LASSEN	6,641	1,176	17.7	16.7	18.7
31	SAN BERNARDINO	429,107	76,768	17.9	17.8	18.0
	CALIFORNIA	**7,563,329**	**1,380,275**	**18.2**	**18.2**	**18.3**
32	SAN FRANCISCO	114,074	21,228	18.6	18.4	18.9
33	PLUMAS	4,971	976	19.6	18.4	20.9
34	SACRAMENTO	268,085	53,348	19.9	19.7	20.1
35	SHASTA	38,939	8,030	20.6	20.2	21.1
36	MENDOCINO	21,267	4,468	21.0	20.4	21.6
37	MODOC	2,550	536	21.0	19.2	22.8
38	STANISLAUS	110,597	23,353	21.1	20.8	21.4
39	SISKIYOU	11,358	2,413	21.2	20.4	22.1
40	LOS ANGELES	2,268,176	496,504	21.9	21.8	22.0
41	LAKE	11,798	2,729	23.1	22.3	24.0
42	HUMBOLDT	29,905	6,918	23.1	22.6	23.7
43	SUTTER	18,003	4,195	23.3	22.6	24.0
44	SAN JOAQUIN	138,154	32,725	23.7	23.4	23.9
45	BUTTE	41,735	10,142	24.3	23.8	24.8
46	TEHAMA	12,881	3,132	24.3	23.5	25.2
47	KERN	167,206	41,417	24.8	24.5	25.0
48	DEL NORTE	6,138	1,528	24.9	23.6	26.1
49	MADERA	26,808	6,817	25.4	24.8	26.0
50	GLENN	7,368	1,939	26.3	25.1	27.5
51	KINGS	30,207	8,146	27.0	26.4	27.6
52	TRINITY	3,416	939	27.5	25.7	29.2
53	MERCED	59,438	17,853	30.0	29.6	30.5
54	YUBA	17,828	5,369	30.1	29.3	30.9
55	IMPERIAL	37,254	11,576	31.1	30.5	31.6
56	FRESNO	204,757	66,416	32.4	32.2	32.7
57	ALPINE	271	89	32.8	26.0	39.7
58	TULARE	101,542	33,707	33.2	32.8	33.5

COUNTY	AGE-ADJUSTED DEATH RATES					
	MOTOR VEHICLE ACCIDENTS (THREE-YEAR AVERAGES)[1]		UNINTENTIONAL INJURIES (THREE-YEAR AVERAGES)[1]		FIREARM INJURIES (THREE-YEAR AVERAGES)[1]	
	1993-1995	1996-1998	1993-1995	1996-1998	1993-1995	1996-1998
CALIFORNIA	**13.2**	**11.4**	**26.6**	**24.2**	**16.3**	**11.6**
ALAMEDA	8.9	7.3	24.6	20.2	17.9	11.6
ALPINE	0.0 +	22.0 *	20.9 ^	22.0 *	0.0 +	22.0 *
AMADOR	16.1 ^	23.2 *	33.1	32.7 *	14.7 ^	8.4 *
BUTTE	17.9	22.8	38.7	41.8	12.0	13.0
CALAVERAS	35.0	29.0 *	49.3	43.2 *	14.1 ^	14.1 *
COLUSA	42.7 ^	24.4 *	47.5 ^	48.3 *	15.6 ^	14.3 *
CONTRA COSTA	10.5	8.8	23.9	20.3	17.6	12.0
DEL NORTE	8.9 ^	36.0 *	25.6 ^	61.8 *	12.8 ^	8.9 *
EL DORADO	16.6	15.3	32.5	32.2	11.4	10.1 *
FRESNO	26.0	22.8	41.8	37.8	20.0	13.5
GLENN	31.9 ^	31.7 *	40.2	46.7 *	7.5 ^	8.1 *
HUMBOLDT	23.9	20.1	47.3	49.3	19.2	12.0 *
IMPERIAL	19.8	24.3	37.0	46.0	8.6	7.7 *
INYO	18.1 ^	29.2 *	49.2	52.1 *	16.0 ^	10.9 *
KERN	21.5	17.5	40.9	37.4	16.3	13.4
KINGS	21.3	21.2	35.3	38.3	11.5	10.1 *
LAKE	27.3	12.9 *	52.6	31.8 *	21.4	13.0 *
LASSEN	15.6 ^	18.1 *	22.4 ^	29.8 *	18.8 ^	8.7 *
LOS ANGELES	11.6	9.3	24.1	20.2	22.7	16.3
MADERA	35.9	27.7	58.8	42.2	19.8	12.2 *
MARIN	9.9	6.6 *	21.3	15.6	6.8	4.6 *
MARIPOSA	26.1 ^	37.5 *	41.4 ^	61.5 *	9.0 ^	21.9 *
MENDOCINO	23.8	23.1 *	42.8	46.4	18.4	13.1 *
MERCED	25.1	22.4	41.0	37.0	11.1	9.4 *
MODOC	33.8 ^	23.0 *	50.3 ^	46.6 *	32.8 ^	13.0 *
MONO	31.2 ^	25.6 *	49.0 ^	37.4 *	15.1 ^	5.1 *
MONTEREY	14.5	12.3	30.1	26.5	11.8	11.1
NAPA	8.5	9.0 *	24.0	21.0	7.2 ^	5.7 *
NEVADA	20.7	16.2 *	35.1	31.2	15.6	9.7 *
ORANGE	8.9	8.2	19.4	18.8	11.1	7.4
PLACER	11.4	12.9	27.4	24.6	11.3	7.9 *
PLUMAS	32.1 ^	17.4 *	55.7	26.4 *	21.9 ^	15.9 *
RIVERSIDE	18.3	17.5	32.3	31.5	17.4	12.4
SACRAMENTO	14.5	12.0	26.6	25.2	17.2	12.4
SAN BENITO	21.9 ^	20.0 *	34.7	40.5 *	4.7 ^	3.2 *
SAN BERNARDINO	18.0	15.0	29.6	25.6	20.5	14.2
SAN DIEGO	10.0	9.2	21.4	22.7	12.0	8.3
SAN FRANCISCO	8.0	7.0	33.6	29.9	14.5	8.3
SAN JOAQUIN	22.8	16.4	39.7	34.0	18.1	14.5
SAN LUIS OBISPO	14.0	11.6	28.1	28.6	8.2	8.5
SAN MATEO	6.3	5.7	18.3	16.0	9.4	6.3
SANTA BARBARA	9.3	9.1	23.5	24.8	6.0	6.5
SANTA CLARA	8.1	8.1	18.2	17.0	6.9	5.2
SANTA CRUZ	10.4	10.8	23.0	23.6	8.5	6.5 *
SHASTA	23.8	19.1	38.8	41.2	17.7	15.6
SIERRA	0.0 +	0.0 +	56.5 ^	33.5 *	2.6 ^	15.0 *
SISKIYOU	27.7	20.9 *	50.0	38.1 *	24.1	13.9 *
SOLANO	13.1	11.6	26.4	25.2	11.5	10.3
SONOMA	13.4	12.2	25.2	25.2	9.3	7.7
STANISLAUS	18.6	18.6	39.9	35.7	13.7	10.4
SUTTER	24.7	22.0 *	38.9	36.6	10.9 ^	14.2 *
TEHAMA	23.1	23.2 *	39.3	35.7 *	22.3	11.8 *
TRINITY	31.6 ^	33.1 *	70.1 ^	54.4 *	33.7 ^	15.1 *
TULARE	27.4	25.9	45.4	44.8	15.8	10.3
TUOLUMNE	20.0	19.9 *	47.4	37.4	13.0 ^	8.2 *
VENTURA	12.5	9.6	23.0	22.5	8.4	8.7
YOLO	13.9	10.3 *	25.1	24.2	10.1	8.6 *
YUBA	28.7	23.7 *	45.1	46.9	16.1 ^	14.4 *

COUNTY	AGE-ADJUSTED DEATH RATES					
	HOMICIDE (THREE-YEAR AVERAGES)[1]		SUICIDE (THREE-YEAR AVERAGES)[1]		ALL CANCERS (THREE-YEAR AVERAGES)[1]	
	1993-1995	1996-1998	1993-1995	1996-1998	1993-1995	1996-1998
CALIFORNIA	**12.7**	**9.0**	**10.9**	**9.4**	**116.2**	**110.3**
ALAMEDA	15.5	10.9	10.2	8.3	122.8	111.4
ALPINE	0.0 +	0.0 +	0.0 +	22.0 *	15.6 ^	169.1 *
AMADOR	1.2 ^	3.0 *	15.9 ^	12.6 *	128.1	105.9
BUTTE	2.7 ^	5.8 *	13.8	14.9	129.1	123.2
CALAVERAS	3.0 ^	2.7 *	14.4 ^	18.4 *	120.2	134.2
COLUSA	2.4 ^	6.0 *	15.2 ^	8.9 *	115.9	139.9
CONTRA COSTA	14.6	8.9	9.2	8.8	113.1	111.3
DEL NORTE	2.2 ^	7.8 *	21.0 ^	9.1 *	126.1	125.3
EL DORADO	4.0 ^	1.8 *	14.9	16.2	108.8	114.6
FRESNO	17.3	10.4	10.4	9.2	111.3	105.4
GLENN	2.7 ^	2.7 *	13.3 ^	12.0 *	126.1	142.6
HUMBOLDT	7.1 ^	4.4 *	18.4	15.7	131.1	133.7
IMPERIAL	6.2 ^	7.4 *	6.8 ^	5.5 *	110.0	110.7
INYO	0.0 +	3.5 *	20.5 ^	15.0 *	98.7	100.2
KERN	12.8	10.2	11.0	10.3	121.1	115.1
KINGS	9.2 ^	7.5 *	9.7	7.7 *	110.1	110.6
LAKE	7.5 ^	7.0 *	23.9	21.0 *	143.8	149.3
LASSEN	10.5 ^	2.7 *	15.5 ^	12.1 *	89.0	87.6
LOS ANGELES	20.5	14.7	10.0	8.2	117.3	107.9
MADERA	13.7	10.5 *	10.6	7.8 *	113.8	102.1
MARIN	2.8 ^	1.6 *	12.4	10.0	114.7	111.6
MARIPOSA	3.2 ^	11.8 *	5.8 ^	12.9 *	116.0	126.8
MENDOCINO	7.5 ^	9.5 *	19.6	17.7 *	138.1	125.7
MERCED	9.8	7.4 *	9.9	7.9 *	123.4	123.6
MODOC	4.8 ^	0.0 +	25.2 ^	17.2 *	84.7	105.2
MONO	3.0 ^	3.5 *	19.1 ^	9.7 *	62.6 ^	70.3 *
MONTEREY	9.5	9.5	10.2	10.0	114.8	105.9
NAPA	2.1 ^	2.1 *	11.7	9.9 *	127.5	122.3
NEVADA	4.8 ^	4.2 *	16.3	12.4 *	106.2	101.0
ORANGE	7.8	4.6	8.8	7.9	109.9	106.9
PLACER	5.3 ^	2.4 *	14.7	12.1	113.3	115.5
PLUMAS	3.7 ^	7.5 *	19.8 ^	14.6 *	100.7	122.6
RIVERSIDE	12.6	8.9	11.8	10.8	118.0	112.3
SACRAMENTO	12.0	9.0	12.9	11.3	119.4	121.7
SAN BENITO	3.9 ^	1.7 *	6.6 ^	6.4 *	101.5	96.5
SAN BERNARDINO	15.2	10.8	11.9	9.8	125.5	119.9
SAN DIEGO	7.9	5.0	12.2	11.1	115.0	114.6
SAN FRANCISCO	13.4	7.5	16.0	11.3	116.0	102.9
SAN JOAQUIN	13.7	11.4	10.5	9.7	114.4	117.5
SAN LUIS OBISPO	2.9 ^	2.9 *	13.0	11.3	118.3	107.8
SAN MATEO	6.3	4.1	10.4	9.1	114.6	105.4
SANTA BARBARA	3.5	4.0 *	12.7	10.0	108.1	98.1
SANTA CLARA	4.0	3.4	8.5	7.5	103.2	96.5
SANTA CRUZ	3.9 ^	3.7 *	14.0	10.0	120.8	97.0
SHASTA	6.1 ^	5.7 *	18.8	19.2	129.2	131.6
SIERRA	0.0 +	0.0 +	2.6 ^	24.0 *	83.9 ^	88.7 *
SISKIYOU	3.3 ^	5.0 *	19.6	17.7 *	127.3	144.3
SOLANO	9.7	6.6	8.0	10.5	124.5	129.2
SONOMA	3.9	3.1 *	13.4	12.6	118.7	118.3
STANISLAUS	7.8	8.2	11.2	9.7	122.7	119.9
SUTTER	4.1 ^	5.3 *	11.7 ^	14.1 *	121.0	109.1
TEHAMA	8.0 ^	7.8 *	15.8 ^	10.6 *	136.5	118.6
TRINITY	8.0 ^	12.5 *	24.2 ^	9.1 *	160.6	156.6
TULARE	11.7	8.2	9.0	7.1	110.2	103.2
TUOLUMNE	4.3 ^	1.5 *	14.7 ^	9.9 *	113.8	147.2
VENTURA	4.7	4.7	9.3	9.8	109.4	101.1
YOLO	4.7 ^	4.0 *	12.3	10.9 *	120.8	128.2
YUBA	6.6 ^	5.8 *	19.3	14.6 *	146.7	136.8

COUNTY	AGE-ADJUSTED DEATH RATES					
	CORONARY HEART DISEASE (THREE-YEAR AVERAGES)[1]		CEREBROVASCULAR DISEASE (THREE-YEAR AVERAGES)[1]		DRUG-RELATED DEATHS (THREE-YEAR AVERAGES)[1]	
	1993-1995	1996-1998	1993-1995	1996-1998	1993-1995	1996-1998
CALIFORNIA	**101.3**	**93.9**	**25.7**	**25.3**	**7.9**	**7.5**
ALAMEDA	96.1	88.4	29.9	28.5	9.5	8.4
ALPINE	15.6 ^	111.5 *	0.0 +	0.0 +	0.0 +	0.0 +
AMADOR	79.0	86.6	25.5	19.8 *	7.5 ^	4.0 *
BUTTE	78.5	72.5	25.2	27.6	9.6	6.5 *
CALAVERAS	80.7	72.1	18.5	26.1	7.6 ^	4.0 *
COLUSA	116.5	80.7	28.2 ^	27.8 *	1.9 ^	1.7 *
CONTRA COSTA	79.8	79.0	25.6	28.4	7.5	5.2
DEL NORTE	111.7	85.9	27.6	28.7 *	8.1 ^	13.2 *
EL DORADO	77.8	70.0	19.2	21.8	6.1 ^	8.8 *
FRESNO	98.9	91.2	23.5	27.6	8.5	6.1
GLENN	88.3	72.9	27.0	24.2 *	2.5 ^	3.3 *
HUMBOLDT	90.7	87.5	22.3	27.9	15.6	14.6
IMPERIAL	115.9	90.3	30.2	28.5	7.5 ^	9.8 *
INYO	89.3	101.0	23.4	29.4 *	5.7 ^	4.9 *
KERN	124.7	116.7	28.8	24.2	8.3	11.5
KINGS	119.0	111.8	34.2	32.6	4.8 ^	6.7 *
LAKE	119.3	113.4	33.7	32.8	12.7 ^	13.0 *
LASSEN	58.4	75.0	17.3 ^	14.2 *	6.5 ^	8.1 *
LOS ANGELES	120.3	106.7	26.7	24.5	8.1	7.3
MADERA	97.6	82.7	20.4	20.8	9.9 ^	5.2 *
MARIN	70.8	61.0	25.0	24.9	7.5	7.1
MARIPOSA	89.9	74.2	23.1 ^	20.2 *	1.8 ^	8.4 *
MENDOCINO	83.5	91.1	31.5	25.5	7.0 ^	10.6 *
MERCED	91.1	91.9	25.6	29.4	6.4	5.6 *
MODOC	111.4	80.2 *	26.2 ^	17.7 *	3.0 ^	5.6 *
MONO	38.2 ^	75.8 *	9.0 ^	18.0 *	0.0 +	6.7 *
MONTEREY	77.1	71.1	25.8	25.8	7.7	8.3
NAPA	82.1	85.6	27.3	26.9	6.9 ^	5.1 *
NEVADA	63.7	66.5	22.4	19.6	6.1 ^	3.2 *
ORANGE	91.8	91.9	21.1	24.3	6.0	5.9
PLACER	79.7	82.4	24.0	24.6	4.9	4.2 *
PLUMAS	68.8	68.0	13.6 ^	17.6 *	4.3 ^	1.5 *
RIVERSIDE	118.9	107.4	25.2	23.9	7.5	7.1
SACRAMENTO	97.2	99.9	24.9	29.5	7.4	7.5
SAN BENITO	75.4	54.5	18.5	21.6 *	2.9 ^	3.7 *
SAN BERNARDINO	128.1	123.4	27.0	25.0	6.6	7.1
SAN DIEGO	89.6	88.8	23.4	24.3	8.1	9.1
SAN FRANCISCO	97.6	83.8	27.7	24.9	20.4	18.1
SAN JOAQUIN	107.0	98.7	29.2	31.9	10.7	11.3
SAN LUIS OBISPO	91.9	83.5	21.9	22.0	7.6	9.6
SAN MATEO	80.5	69.7	28.8	25.7	6.3	4.9
SANTA BARBARA	83.2	74.1	23.0	23.6	9.3	9.5
SANTA CLARA	80.9	76.9	23.7	23.6	4.8	4.5
SANTA CRUZ	86.4	68.1	24.7	21.7	8.9	6.9 *
SHASTA	89.5	89.1	24.4	22.4	7.2	8.8 *
SIERRA	68.0 ^	57.1 *	8.2 ^	14.7 *	8.0 ^	0.0 +
SISKIYOU	94.5	82.7	20.3	27.5	1.8 ^	1.3 *
SOLANO	84.6	90.4	32.9	33.0	5.4	4.6
SONOMA	83.9	78.8	27.4	29.1	8.1	8.3
STANISLAUS	107.7	114.9	25.7	28.6	10.0	9.8
SUTTER	88.8	95.0	37.0	27.4	2.2 ^	2.8 *
TEHAMA	84.6	82.3	28.3	29.1	4.1 ^	5.7 *
TRINITY	84.4	75.3 *	21.8 ^	24.7 *	6.9 ^	2.4 *
TULARE	110.6	102.4	29.4	30.9	7.4	9.0
TUOLUMNE	84.4	79.4	24.2	25.5	7.0 ^	8.5 *
VENTURA	82.2	75.2	24.5	22.9	6.0	7.4
YOLO	85.1	82.5	27.1	26.7	6.6 ^	4.8 *
YUBA	126.5	111.2	30.5	33.3	7.1 ^	7.4 *

COUNTY	MORBIDITY RATE REPORTED INCIDENCE OF AIDS (THREE-YEAR AVERAGES)[2]		MORTALITY RATE INFANT MORTALITY, ALL RACE/ETHNIC GROUPS (THREE-YEAR AVERAGES)[3]		PERCENT LOW BIRTHWEIGHT INFANTS (THREE-YEAR AVERAGES)[4]	
	1993-1995	1996-1998	1991-1993	1994-1996	1993-1995	1996-1998
CALIFORNIA	**29.4**	**17.3**	**7.2**	**6.4**	**6.1**	**6.1**
ALAMEDA	35.2	22.8	7.0	6.0	7.1	7.0
ALPINE	0.0 +	0.0 +	26.3 ^	0.0 +	0.0 +	0.0 +
AMADOR	7.8 ^	8.0 *	5.8 ^	7.4 *	4.3	5.4 *
BUTTE	7.0	5.2 *	6.4	8.3	5.6	4.7
CALAVERAS	0.9 ^	6.2 *	6.2 ^	13.9 *	5.8	4.7 *
COLUSA	7.3 ^	1.8 *	4.1 ^	7.3 *	6.2	4.8 *
CONTRA COSTA	22.1	10.8	6.0	5.8	6.2	6.3
DEL NORTE	7.6 ^	3.5 *	7.2 ^	11.2 *	5.5	5.6 *
EL DORADO	8.8	3.4 *	6.3	5.6 *	5.6	6.1
FRESNO	15.5	9.6	8.9	8.6	6.6	6.5
GLENN	1.2 ^	2.5 *	7.2 ^	3.7 *	3.8	4.1 *
HUMBOLDT	14.4	5.5 *	8.6	8.1 *	5.1	4.7
IMPERIAL	9.9	4.0 *	5.0	5.2 *	5.1	5.4
INYO	1.8 ^	3.6 *	14.7 ^	8.9 *	6.2	6.5 *
KERN	15.0	12.5	10.3	10.3	6.7	6.3
KINGS	11.2	17.0	7.5	9.5	5.9	5.9
LAKE	16.2 ^	18.2 *	6.6 ^	7.3 *	5.6	5.5
LASSEN	13.5 ^	18.7 *	7.3 ^	6.7 *	5.7	4.0 *
LOS ANGELES	34.9	21.7	7.5	6.6	6.3	6.5
MADERA	10.5	5.0 *	6.7	6.6 *	5.5	5.3
MARIN	61.0	24.8	4.8	3.7 *	5.4	5.4
MARIPOSA	7.8 ^	4.2 *	1.9 ^	2.0 *	6.1 ^	6.4 *
MENDOCINO	17.6	5.4 *	10.2	7.0 *	5.5	5.4
MERCED	5.8	4.8 *	8.2	7.3	5.6	6.1
MODOC	0.0 +	0.0 +	6.2 ^	14.0 *	7.8 ^	5.8 *
MONO	3.2 ^	0.0 +	2.3 ^	0.0 +	7.7	5.6 *
MONTEREY	19.9	11.7	6.3	5.7	5.4	5.2
NAPA	12.4	6.0 *	5.2 ^	4.9 *	4.3	4.5
NEVADA	8.9 ^	7.9 *	4.9 ^	6.5 *	4.7	5.6
ORANGE	18.1	10.5	5.8	5.3	5.3	5.3
PLACER	4.4 ^	2.3 *	5.7	5.6 *	5.1	4.9
PLUMAS	3.1 ^	3.3 *	16.5 ^	6.0 *	5.0 ^	3.7 *
RIVERSIDE	21.2	17.4	8.4	7.2	6.1	6.3
SACRAMENTO	20.3	13.4	7.8	7.4	6.6	6.6
SAN BENITO	10.4 ^	2.9 *	6.5 ^	5.6 *	4.9	4.6
SAN BERNARDINO	15.4	9.6	8.6	7.7	6.6	6.5
SAN DIEGO	32.6	21.2	6.4	5.8	5.9	5.9
SAN FRANCISCO	232.7	103.5	7.0	5.3	6.9	6.8
SAN JOAQUIN	13.1	9.0	8.6	6.8	6.6	6.5
SAN LUIS OBISPO	18.4	13.2	6.7	5.2 *	5.0	5.2
SAN MATEO	23.2	9.6	5.1	4.5	5.5	6.1
SANTA BARBARA	14.4	7.5	5.9	5.1	5.4	6.0
SANTA CLARA	18.9	9.9	6.1	5.3	5.7	6.0
SANTA CRUZ	15.7	7.8	5.8	5.6	5.0	5.0
SHASTA	3.4 ^	3.7 *	7.9	7.3 *	5.3	5.1
SIERRA	10.0 ^	0.0 +	16.1 ^	0.0 +	4.8 ^	0.0 +
SISKIYOU	5.1 ^	6.8 *	9.3 ^	5.4 *	5.2	5.4
SOLANO	26.6	17.4	7.6	6.6	6.5	6.3
SONOMA	34.0	13.8	5.7	4.6	5.0	5.1
STANISLAUS	10.9	8.1	7.4	7.0	6.3	6.4
SUTTER	6.2 ^	5.3 *	6.2 ^	6.8 *	5.7	6.5
TEHAMA	4.8 ^	2.4 *	5.8 ^	6.0 *	5.5	4.6
TRINITY	7.3 ^	2.5 *	13.5 ^	7.7 *	6.6 ^	6.8 *
TULARE	6.9	4.4 *	6.1	6.5	5.8	5.5
TUOLUMNE	12.1 ^	5.1 *	8.3 ^	7.0 *	7.1	5.7
VENTURA	10.1	7.2	5.7	5.4	5.5	5.5
YOLO	10.5	5.2 *	8.6	7.7 *	5.7	5.8
YUBA	9.1 ^	5.4 *	7.4 ^	5.7 *	6.5	6.8

TECHNICAL NOTES

DATA SOURCES

The California Department of Health Services, Center for Health Statistics, Office of Vital Records, was the source for the birth and death data that appear in this report. These data were tabulated from the Birth and Death Statistical Master Files for the years 1996 through 1998, and from the linked births-deaths in the Birth Cohort-Perinatal Outcome Files for the years 1994 through 1996, which are based on the Statistical Master Files.

The California Department of Health Services, Division of Communicable Disease Control, Office of Statistics and Surveillance, was the source for the reported case incidence of measles, tuberculosis, and primary and secondary syphilis. Incidence data of diagnosed AIDS cases were provided by the California Department of Health Services, Office of AIDS, AIDS Reporting System. Breastfeeding incidence data were provided by the California Department of Health Services, Genetic Disease Branch, Newborn Screening Program.

The California Department of Finance, Demographic Research Unit and Census Data Center, provided the population data. The 1997 population data used in this report were the Race/Ethnic Population by County with Age and Sex Detail, June 1999. The number and percentage of the population under 18 years of age who were below poverty level were tabulated from the U.S. Bureau of the Census, 1990 Census, Summary Tape File 3.

DATA DEFINITIONS

Mortality (Tables 1-12): A consistent use of the consensus set of health status indicators has been facilitated by reference to the causes of mortality coded according to the International Classification of Diseases, Ninth Revision (ICD-9):

Table 1:	All Causes of Death	001 - E999
Table 2:	Motor Vehicle Crashes	E810 - E825
Table 3:	Unintentional Injuries	E800 - E949
Table 4:	Firearm – related Deaths	E922.0 - E922.3, E922.8 - E922.9, E955.0 - E955.4, E965.0 - E965.4, E970, E985.0 - E985.4
Table 5:	Homicides	E960 - E969
Table 6:	Suicides	E950 - E959
Table 7:	All Cancers	140 - 208
Table 8:	Lung Cancer	162.2 - 162.9
Table 9:	Female Breast Cancer	174
Table 10:	Coronary Heart Disease	402, 410 - 414, 429.2
Table 11:	Cerebrovascular Disease	430 - 438
Table 12:	Drug-Related Deaths	292, 304, 305.2 - 305.9, E850 - E858, E950.0 - E950.5, E962.0, E980.0 - E980.5

The cardiovascular disease health indicator has been divided into coronary heart disease and cerebrovascular disease (stroke), because Year 2000 National Health Objectives have been separately established for these two diagnostic groups.

Morbidity (Tables 13-16): In general, the case definition of a disease is in terms of laboratory test results, or in the absence of a laboratory test, then a constellation of clearly specified signs and symptoms which meet a series of clinical criteria.

The original case definition for Acquired Immunodeficiency Syndrome (AIDS) is contained in the ***Morbidity and Mortality Weekly Report (MMWR)***, Supplement 1S, Volume 36, August 14, 1987. The 1993 revised classification system for human immunodeficiency virus (HIV) infection and the expanded surveillance case definition for AIDS is in the ***MMWR***, Volume 41, Number RR-17, December 18, 1992. Original case definitions for measles, syphilis, and tuberculosis are contained in the ***Morbidity and Mortality Weekly Report (MMWR), Recommendations and Reports***, Volume 39, Number RR-13, October 19, 1990.

Caution in interpretation of morbidity tables is advised due to incomplete reporting of infectious and communicable diseases by many health care providers. Many factors contribute to the underreporting of these diseases. These factors include: lack of awareness regarding disease surveillance; lack of follow-up on support staff assigned to report; failing to perform diagnostic lab tests to confirm or rule out infectious etiology; concern for anonymity of the client; or expediting treatment in lieu of waiting for laboratory results because of time or cost constraints.

All vital events are subject to the vagaries of reporting. This fact forms the basis for the argument supporting the concept of sampling error in vital statistics. The problem of the uncertainty of reporting all events can be especially true for morbidity data. Therefore, the headings of the tables on AIDS, Measles, Tuberculosis, and Syphilis emphasize that the data show only **reported** number of cases. For more complete and technical definitions of types of morbidity, contact the Division of Communicable Disease Control, or the Office of AIDS.

Birth Cohort Infant Mortality (Tables 17A-17E): The infant mortality rate is the number of deaths among infants under one year of age per 1,000 live births. It is a universally accepted and easily understood indicator which represents the overall health status of a community. Studies of infant mortality, in which race is reported on birth certificates independently from death certificates, show that infant death rates based on these data may underestimate the infant death rates for infants of all race/ethnic groups and especially for certain race/ethnic groups. Infant mortality rates for race/ethnic groups in this report are based on linked birth and infant death records in the Birth Cohort-Perinatal Outcome Files, which generate more accurate estimates of the total number of infant deaths. Also, infant death rates that are calculated from these files provide a consistent identification of race/ethnicity for both births and deaths.

Since delayed birth and death certificate data are included in the Birth Cohort-Perinatal Outcome Files after the Birth and Death Statistical Master Files have been closed to further processing, these files cannot be as timely as the Statistical Master Files. However, the Birth Cohort-Perinatal Outcome Files are more complete.

Race/Ethnicity (Tables 17A-17E): The four groups, based on mother's race/ethnicity, are mutually exclusive and all inclusive categories. They are also consistent for the most part with those used by the State Census Data Center, Department of Finance, for compiling 1997 population estimates.

The mother's Hispanic origin is determined first, irrespective of race, and then second, the race categories for the remaining non-Hispanics are determined. The White category includes the following groups: White, Other (Specified), Not Stated, and Unknown. The White race/ethnic group is also non-Hispanic. The Black category only includes non-Hispanic Blacks. The Asian/Other category includes the following groups: Aleut, American Indian, Asian Indian, Asian (specified/unspecified), Cambodian, Chinese, Eskimo, Filipino, Guamanian, Hawaiian, Japanese, Korean, Laotian, Other Pacific Islander, Samoan, Thai, and Vietnamese. The Asian/Other race/ethnic group is also non-Hispanic. This composition is somewhat different from the Asian/Pacific Islander category specified by USPHS in ***Healthy People 2000***, primarily because of inclusion of Aleut, American Indian and Eskimo groups. The Hispanic ethnic group includes any race, but is made up primarily of the White race.

Natality (Tables 18-20B): The natality data were obtained from the Birth Statistical Master Files from 1996 through 1998. Records with unknown birthweight were excluded from the total number of live births shown in Table 18. Also, records with unknown prenatal care were excluded from the total number of live births shown in Table 20A, and records with unknown adequacy of prenatal care were excluded from the total number of live births shown in Table 20B.

Low birthweight has been associated with negative birth outcomes, and as an indicator of access problems and/or need for prenatal care services. Prevalence of low birthweight is defined as the percentage of live births weighing less than 2,500 grams (approximately 5.5 pounds). Birth rates to adolescents are also an indicator for other high-risk pregnancy factors. It is defined as the number of births to mothers 15-19 years of age per 1,000 female population 15-19 years of age.

The prenatal care indicator, Month Prenatal Care Began, has been associated with access to care. Late prenatal care is defined as the percentage of mothers who did not begin prenatal care in the first trimester. However, the percentage of births in which the mother's prenatal care began in the first trimester, as a health indicator, does not readily permit an unambiguous interpretation. According to some researchers, it fails to document whether or not prenatal care actually continues for the course of the pregnancy. Therefore, in addition to Prenatal Care Not Begun First Trimester of Pregnancy, this *Profiles* includes adequacy of prenatal care based on the Adequacy of Prenatal Care Utilization Index.

In past *Profiles* reports, the Kessner Index was used to measure the adequacy of prenatal care. The Kessner Index was replaced last year by the Adequacy of Prenatal Care Utilization Index, which is the methodology specified in *Healthy People 2010 Objectives*. The Adequacy of Prenatal Care Utilization Index developed by Milton Kottlechuck attempts to characterize prenatal care utilization on two independent and distinctive dimensions: Adequacy of Initiation of Prenatal Care and Adequacy of Received Services (once prenatal care has begun). The initial dimension, Adequacy of Initiation of Prenatal Care, characterizes the adequacy of the timing of initiation of care (month prenatal care began). The second dimension, Adequacy of Received Services, characterizes the adequacy of prenatal care visits (number of visits) received during the time the mother is actually in prenatal care (from initiation until the delivery). The adequacy of prenatal visits is based on the recommendations established by the American College of Obstetricians and Gynecologists. These two dimensions are then combined into a single summary prenatal care utilization index, which contains the following five adequacy of prenatal care categories:

(1) Adequate Plus: Prenatal care begun by the fourth month and 110 percent or more of the recommended visits received.
(2) Adequate: Prenatal care begun by the fourth month and 80 to 109 percent of the recommended visits received.
(3) Intermediate: Prenatal care begun by the fourth month and 50 to 79 percent of the recommended visits received.
(4) Inadequate: Prenatal care begun after the fourth month or less than 50 percent of the recommended visits received.
(5) Missing Information: Unknown adequacy of prenatal care.

Only "adequate and adequate plus" prenatal care are used in Table 20B to measure the adequacy of prenatal care utilization. Also, please note the two-factor index does not assess the quality of the prenatal care that is delivered, but simply its utilization. For further information on the Adequacy of Prenatal Care Utilization Index see the *American Journal of Public Health* article by Kottelchuck listed in the Bibliography.

Breastfeeding Initiation During Early Postpartum (Table 21): Extensive research, especially in recent years, demonstrates the diverse and compelling advantages to infants, mothers, families, and society from breastfeeding and the use of human milk for infant feeding. Breastfeeding provides advantages with regard to the general health, growth, and development of infants, while significantly decreasing their risk for a large number of acute and chronic diseases. There are also a number of studies that indicate possible health benefits for mothers such as less postpartum bleeding, rapid uterine involution, and reduced risk of ovarian cancer and post menopausal breast cancer. In addition to individual health benefits, breastfeeding provides significant social and economic benefits to the nation, including reduced health care costs and reduced employee absenteeism for care attributable to child illness.

The breastfeeding initiation data presented in this report were obtained from the Genetic Disease Branch, Newborn Screening Program. The Newborn Screening Program collects feeding data from all mothers who gave birth in a California hospital, usually within 24 hours of life. Births that occurred outside of California, at home, or in-transit are not collected through this program and are not represented in Table 21. These births, however, account for less than 1.0 percent of the total resident live births in California.

The feeding data captured by the Newborn Screening Program were compiled into the following four categories:

(1) Breastfed: Exclusively breastfed.
(2) Combination: Both breastfed and formula fed.
(3) Non-Breastfed: Formula fed and other (e.g., line fed).
(4) Unknown: Feeding choice unknown at the time of hospital discharge.

The breastfeeding initiation data presented in Table 21 are a composite of both "breastfed" and "combination" fed births. Records that were of "unknown" feeding type were excluded from the analyses.

The infant feeding data collected on the Newborn Screening form reflect the intentions of the mother at that time, and no follow-up survey is conducted to validate the accuracy of the information after the mother is discharged from the hospital. Caution should also be taken when analyzing breastfeeding initiation data alone because breastfeeding duration is not taken into consideration. Examination of breastfeeding initiation data along with duration data is recommended to thoroughly measure the effects of breastfeeding. Since appropriate data are not currently available, breastfeeding duration data are not presented in this report.

Childhood Poverty (Table 22): Children under the age of 18 living in families at or below the poverty level define the category of the population under 18 below poverty. The percent of children under 18 in this category is an indicator of global risk factors that have implications for the accessibility to health services. This indicator was modified from that specified in **Healthy People 2000**, which targeted children under 15 years of age, because the Census Bureau produces standard tabulations only for age groups under 18.

CRUDE RATES AND AGE-ADJUSTED RATES

The numerator data used to compute rates and percentages were three-year averages compiled by: county of residence of the decedent for mortality data; county of residence of the mother for birth data (including linked birth-death data for infant mortality); and county of occurrence for morbidity data, except for AIDS which was compiled by county of residence. Three-year averages tend to reduce the year-to-year fluctuations and increase the stability of estimates of vital events compared to data from single years.

An unstandardized rate (usually referred to as a "crude rate") is obtained by dividing the total number of vital events (e.g. deaths) by the total population at risk, then multiplying by some convenient basis (e.g. 100,000). Subpopulations (such as counties) with varying age compositions can have highly disparate death rates, since the risk of dying is primarily a function of age. Therefore, counties with a large component of elderly tend to have a high death rate simply because the risk of dying is determined mostly by age. Any unwanted effect of different age compositions among counties can be removed from the county death rates by the process of "age-adjustment". By removing the effect of different age compositions, counties with age-adjusted rates are more directly comparable with the Year 2000 National Objective.

Age-adjusted death rates are hypothetical rates obtained by calculating age-specific rates for each county and multiplying these rates by proportions of the same age categories in a "standard population", then summing the apportioned specific rates to a county total. The "standard population" used in the age-adjusted county death rates in this report is the 1940 United States Standard Million Population. The age-adjusted rates put all counties on the same footing with respect to the effect of age and permit direct comparisons among counties. It is important to understand that age-adjusted death rates should be viewed as constructs or index numbers rather than as actual measures of the risk of mortality. Crude death rates, which include the effect of age, are the rates that should be applied when measuring the actual risk of dying in a specific population. For further information on age-adjusted rates, see the National Center for Health Statistics (NCHS) report by Curtin and Klein listed in the Bibliography on "Direct Standardization".

The 1940 U.S. population was used as the "standard population", in this report, because the national objectives in *Healthy People 2000* are based on the 1940 U.S. population. The use of an agreed upon standard population permits direct comparison with both national data and the year 2000 objectives.

Data for the morbidity tables were not age-adjusted due to the unavailability of data by age. Hence, only crude rates can be calculated. Although age and aging do impact morbidity, the effect is not as prominent as its impact on mortality.

Birth cohort infant death rates are also not age-adjusted. Since the deaths are linked to the births on a record by record basis, these rates are based on a numerator (deaths) and a denominator (births) from the same record. Age-adjusting is not applicable to these data. Comparisons among counties reflect the actual risk of dying within one year of birth in the cohort of births, and at the same time, are unaffected by confounding of different age compositions because the cohorts are all of the same age (under one year).

RELIABILITY OF RATES

All vital statistics rates, including morbidity rates, are subject to random variation. This variation is inversely related to the number of events (e.g. death) used to calculate the rate. The smaller the frequency of occurrence of an event, then the greater the likelihood of random fluctuations within a specified time period. The more rare an event, the relatively less stable its occurrence from observation to observation. Even present day statewide crude death rates may be interpreted as "rare" events occurring on the average of less than one death in 147 persons in the course of a year. (See Table 1: Deaths Due to All Causes, which shows 678.9 deaths per 100,000 population statewide).

As a consequence, counties with only a few deaths, or a few cases of morbidity, can have highly unstable rates from year to year. The observation and enumeration of rare events is beset with uncertainty. The observation of no vital events is especially hazardous, regardless of the size of the population. This report
reduces some year-to-year fluctuation in the occurrence of rare events by basing death rates on three-year average number of vital events (e.g. 1996-1998), divided by the population in the middle year (e.g. 1997). The "standard error" of a death rate and "coefficient of variation" (or relative standard error) provide a rational basis for determining which rates may be considered "unreliable". Although reliability of a death rate is not either-or/on-off, in this report, counties with a relative standard error of greater than or equal to 23% of the rate or percent are marked with a " * " (asterisk). This criterion conforms with the standard used by the National Center for Health Statistics in determining the reliability cut-off for rates and percents. In addition, rates of zero, based on no death events, are denoted with a "+" (plus sign), because the standard error cannot be calculated, and is indeterminate. Furthermore, whenever the standard error is indeterminate, the confidence limits are not calculated, and a "-" (dash) denotes these confidence limits.

The 95% confidence limits depict the region within which (if data similar to the present set were independently acquired on 100 separate occasions) the rate would probably occur in 95 of those sets of data. In five of those 100 data sets, the rate or percent would fall outside the limits.

Finally, for appropriate statistical methodologies in comparing independent rates or percentages, please see the NCHS reports listed in the Bibliography by Curtin and Klein on "Direct Standardization" and by Kleinman on "Infant Mortality".

RANKING OF COUNTIES

Data on each health indicator, except adequacy of prenatal care (Table 20B) and incidence of breastfeeding (Table 21), are displayed with the counties in rank order by increasing rates or percentages (calculated to 15 decimal places); lower rates or percentages are near the top of the table and higher rates or percentages are near the bottom of the table. Data for adequacy of prenatal care and incidence of breastfeeding are displayed with the counties in rank order by decreasing percentages (calculated to 15 decimal places); higher percentages are near the top of the table and lower percentages are near the bottom of the table. For all health indicators, counties with identical rates or percentages are ranked by size of population, with larger counties ahead of smaller counties.

FORMULAS USED IN THIS REPORT

$$CDR = \left(\frac{_nD}{Npop} \right) \times B$$

$$ADR = \sum W_a \left(\frac{_nD_a}{Npop_a} \right) \times B$$

$$ASDR = \left(\frac{_nD_a}{Npop_a} \right) \times B$$

$$SE_x = \left(\frac{CDR}{\sqrt{_n\overline{D}}} \right)$$

$$SE_y = \sqrt{ \sum \frac{(W_a \times ASDR)^2}{_nD_a} }$$

$$RSE_x = \left(\frac{SE_x}{CDR} \right) \times 100$$

$$RSE_y = \left(\frac{SE_y}{ADR} \right) \times 100$$

Lower 95% CL = ADR − (1.96 x SE_y)   Upper 95% CL = ADR + (1.96 x SE_y)

Where:
CDR	=	Crude Death Rate
ADR	=	Age-Adjusted Death Rate
ASDR	=	Age-Specific Death Rate
$_nD$	=	Number of Deaths
Npop	=	Population Size
$_nD_a$	=	Number of Deaths in an Age Group
$Npop_a$	=	Population Size in Same Age Group
B	=	Base (100,000)
W_a	=	Age-Specific Weight (Standard Population Proportion)
SE_x	=	Standard Error of a Crude Death Rate
RSE_x	=	Relative Standard Error of a Crude Death Rate
SE_y	=	Standard Error of an Age-Adjusted Death Rate
RSE_y	=	Relative Standard Error of an Age-Adjusted Death Rate
CL	=	Confidence Limit

PROCEDURE FOR CALCULATING AGE-ADJUSTED RATES BY THE DIRECT METHOD

Age-adjusted rates calculated in this report follow the procedure which was used to set the Year 2000 National Objectives. The standard population was 1940 United States population (the U.S. "Standard Million"). The data below were taken from Table 1: Deaths Due to All Causes, 1996-1998 for Alameda County.

ALAMEDA COUNTY					
AGE GROUPS	1996-1998 DEATHS (AVERAGE) (A)	1997 POPULATION (B)	AGE-SPECIFIC RATE/100,000 (C)	1940 U.S. STANDARD MILLION PROPORTIONS (D)	WEIGHTED RATE FACTORS (E)
TOTAL	9,681.7	1,398,421	692.3		
<1	118.3	20,834	568.0	0.015343	8.7
1-4	21.3	86,091	24.8	0.064718	1.6
5-14	25.0	203,117	12.3	0.170355	2.1
15-24	121.7	164,642	73.9	0.181677	13.4
25-34	234.0	226,091	103.5	0.162066	16.8
35-44	473.3	253,220	186.9	0.139237	26.0
45-54	773.0	190,719	405.3	0.117811	47.7
55-64	969.7	106,386	911.5	0.080294	73.2
65-74	1,838.7	79,443	2,314.4	0.048426	112.1
75-84	2,692.0	50,607	5,319.4	0.017303	92.0
>84	2,411.7	17,271	13,963.7	0.002770	38.7
AGE-ADJUSTED RATE---					432.4

STEP 1: Array the data of three-year average number of deaths and population for eleven age groups in columns A and B.

STEP 2: Calculate age-specific rates by dividing the number of deaths in column A (numerator) by the population in column B (denominator). Multiply the result (*quotient*) by the base of 100,000 to obtain the rates in column C.

STEP 3: Multiply each age-specific rate in column C by the corresponding 1940 U.S. Standard Million proportion in column D and enter the result in column E.

STEP 4: The values for each age group in column E are summed to obtain the Age- Adjusted Death Rate for Alameda County of 432.4 per 100,000 population.

STEP 5: Repeat Steps 1 through 4 for each county and the statewide total. Note that the 1940 U.S. Standard Million proportions remain the same for each county and the state.

STEP 6: Direct comparisons can now be made among the counties, with the removal of the effect that varying county age compositions may have on death rates.

BIBLIOGRAPHY

American Academy of Pediatrics. Breastfeeding and the Use of Human Milk (RE9729). *Pediatrics,* Vol. 100, No. 6, December 1997: pp. 1035-1039.

Armitage P, Berry G. *Statistical Methods in Medical Research*, second edition. Boston: Blackwell Scientific Publication, 1987.

Curtin LR, Klein RJ. Direct Standardization (Age-Adjusted Death Rates), *Healthy People 2000 Statistical Notes*. National Center for Health Statistics, DHHS Pub. No. (PHS) 95-1237, March 1995; No. 6-Revised.

Fleiss JL. *Statistical Methods for Rates and Proportions*, second edition. New York: John Wiley and Sons, 1981.

Foster JE. Using Natality Data in Health Planning. *Statistical Notes for Health Planners*. National Center for Health Statistics, DHHS Pub. No. (PHS) 81-1237, November 1980; No. 12.

Freedman MA. Health Status Indicators for the Year 2000. *Healthy People 2000 Statistical Notes*. National Center for Health Statistics, DHHS Pub. No. (PHS) 92-1237, Fall 1991; Vol 1, No. 1.

Institute for Medicine. *The Future of Public Health*. Washington, D.C.: National Academy of Science Press, 1988; pp. 13-15.

Klein RJ, Hawk SA. Health Status Indicators: Definitions and National Data. *Healthy People 2000 Statistical Notes*. National Center for Health Statistics, DHHS Publication (PHS) 92-1237, Spring 1992; Vol. 1, No. 3.

Kleinman JC. Infant Mortality. *Healthy People 2000 Statistical Notes*. National Center for Health Statistics, DHHS Pub. No. (PHS) 92-1237, Winter 1991; Vol. 1, No.2.

Kleinman JC. Mortality. *Statistical Notes for Health Planners*. National Center for Health Statistics, DHHS Pub. No. (HRA) 77-1237, February 1977; No. 3.

Kottlechuck M. An Evaluation of the Kessner Adequacy of Prenatal Care Index and a Proposed Adequacy of Prenatal Care Utilization Index. *American Journal of Public Health*, Vol. 84, No. 9, September 1994: pp. 1414-1420.

Lilienfeld AM, Lilienfeld DE. Foundations of Epidemiology, second edition. New York: Oxford University Press, 1980.

Richards F. *Healthy California 2000: California's Experience in Achieving the National Health Promotion and Disease Prevention Objectives*. Center for Health Statistics, California Department of Health Services, June 1999.

Riedmiller K, Harms C. *Vital Statistics of California, 1996*. Center for Health Statistics, California Department of Health Services, September 1998.

Tashiro M. A Description of the California Birth Cohort Perinatal File. *Data Matters* #83-11078. Center for Health Statistics, California Department of Health Services, February 1984.

U. S. Department of Health and Human Services. *Healthy People 2000: National Health Promotion and Disease Prevention Objectives for the Nation.* Washington, D.C.: Public Health Service, DHHS Pub. No. (PHS) 91-50212, 1991.

U. S. Department of Health and Human Services. *Healthy People 2010 Objectives: Draft for Public Comment.* U.S. Government Printing Office: 1998-444-327/90758.

World Health Organization. *Manual of the International Classification of Diseases, Injuries, and Causes of Death*, ninth revision. Geneva: World Health Organization, 1977.

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